Application Performance Monitoring for WhatsUp Gold v16.1

User Guide

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CHAPTER 1

Introduction

In This Chapter

APM Overview

Application Performance Monitoring for WhatsUp Gold monitors applications across multiple devices, servers, and systems, providing performance statistics and overall application health, while alerting on performance degradation and potential problems before they result in service outages. Application Performance Monitoring helps IT organizations measure and guarantee Service Level Agreements (SLAs) and assists in pinpointing application performance bottlenecks and points of failure. For more information, see *Getting Started with APM* (on page 3) and the *Application Performance Monitoring for WhatsUp Gold v16.1 Getting Started Guide* (http://www.whatsupgold.com/WUGAPM_161GSG).

Note: This feature is available with WhatsUp Gold Premium Edition only. To update your license, visit the *WhatsUp Customer Portal* (http://www.whatsupgold.com/wugCustPortal).

Each application monitored by Application Performance Monitoring is comprised of a collection of individual *components* (on page 27) as defined in the application profile. This application profile is then applied to a WhatsUp Gold device, creating an application instance.

Following are some of the application types that the WhatsUp Gold Application Performance Monitoring plug-in supports:

- Microsoft Exchange 2010
- Microsoft Exchange 2007
- Microsoft Server 2008
- Microsoft Server 2003
- Microsoft Active Directory/Domain Controller
- Oracle 11G
- Microsoft SQL 2008
- Microsoft SQL 2005
- IIS 7.X

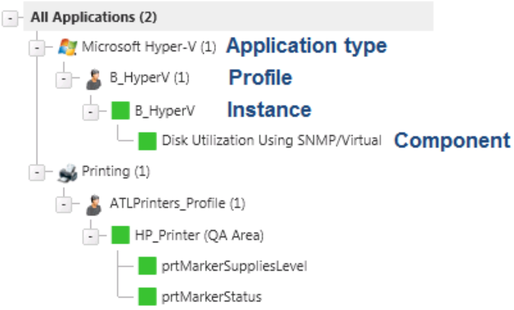
- Ipswitch WhatsUp Gold
- Microsoft SharePoint 2010
- Apache
- IBM WebSphere Version 7
- My SQL 5.X
- Cisco Unified Communications Manager
- Ipswitch iMail

Application Performance Monitoring is licensed on a per-component basis, meaning that each component monitored uses *one* license. A license is also required for a *discrete application* (on page 20), an application that acts as a component of another application.

Learning about APM terminology

The following terms are used throughout Application Performance Monitoring:

- **Application Type**. Groups application profiles, instances, and components by the type of application (e.g. SQL Server, IIS, Windows 2008 Server). After profiles, instances, and components are configured for an application, you will begin monitoring information about application health.



- **Application Profile**. An application profile is a blueprint for monitoring a given type of application within Application Performance Monitoring. It defines the collection of components and distinct applications that reflect the health and status of a specific type of application. An application instance is created from the application profile by associating it with the actual devices that host the components of the application as defined by the application profile. Changes to the application profile are inherited by all of the instances created from the profile. Changes in the profile are not inherited by overridden fields.
- **Application Instance**. An application instance is a running copy of an application profile that monitors the defined collection of components, distinct applications, and thresholds necessary to define the health and performance of a given type of application. An application instance can *extend* the application profile by adding components, component groups, or discrete applications. The application profile is *not* changed when an application instance is extended.
- **Component**. A component is a single data point that is collected as part of an application profile. Example: CPU Utilization.

- **Critical component**. A critical component is a component that impacts the status of an application instance. As a result, a critical component that goes into the down state, causes the application instance to go into the down state. However, if a non-critical component goes into a down state, the application instance goes into a warning state and only the component indicates being in the down state.
- **Critical component group**. A critical component group is a grouping of components that contains specific logic to allow for complex evaluation of the up/down state of an application. For example, given four components A,B,C and D, the following logic can be applied, so that if A and B are down or C and D are down the application is placed into the down state. ((A and B) or (C and D)). Critical component groups are always considered "critical", in that if a critical component group is evaluated to be in the down state, the entire application is in the down state.
- **Application**. An application is made up of one or more programs running on one or more monitored systems.
- **Simple application**. A simple application is an application that is not dependent on another application to run. Example: Microsoft Server 2008 R2.
- **Complex application**. A complex application is an application configured to be dependent on one or more applications to run. Example: WhatsUp Gold (requires IIS and SQL Server).
- **Discrete application**. A discrete application is an application upon which a complex application has a dependency. For example, IIS and SQL Server are discrete applications on which the complex application WhatsUp Gold is dependent. A discrete application is used when you are monitoring a complex application.

Getting Started with APM

Configuring Application Performance Monitoring to monitor an application is a simple process that starts with selecting a profile that captures the data points necessary to understand the performance, health, and status of a given type of application. The application profile groups the components, discrete applications, and associated thresholds necessary to capture the data points into a blueprint that can be used to create individual application instances. These instances actively monitor your applications.

Ipswitch provides a selection of profiles for use with Application Performance Monitoring which are available in the Application Performance Monitoring installation, or by download from the *WUGSpace Community* (http://www.whatsupgold.com/WUGProfilesInfo). You can also create your own application profiles which can be shared on the *WUGSpace Community* (http://www.whatsupgold.com/WUGProfilesInfo).

After you have the necessary profiles, you can use Application Performance Monitoring to automatically discover your applications and create instances for each discovered application, or you may choose to manually create and modify instances individually before you begin monitoring.

The following flowcharts represent the typical process of setting up an application to be monitored with APM:

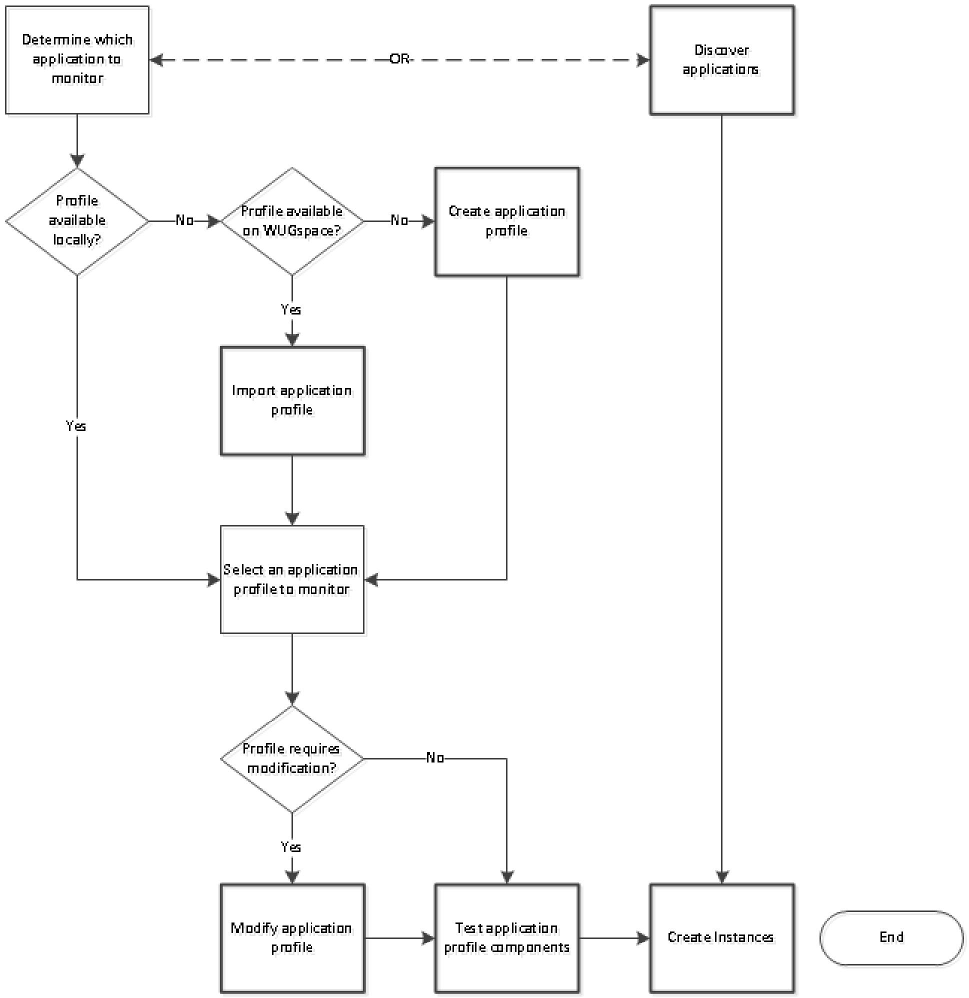
- *Application Profile Workflow* (on page 4)

- *Application Component Workflow* (on page 5)
- *Action Policy Workflow* (on page 6)

For more information, see the *Application Performance Monitoring for WhatsUp Gold v16.1 Getting Started Guide* (http://www.whatsupgold.com/WUGAPM_161GSG).

Application Profiles

Refer to the table below for step-by-step instructions for each configuration process in the flow chart.

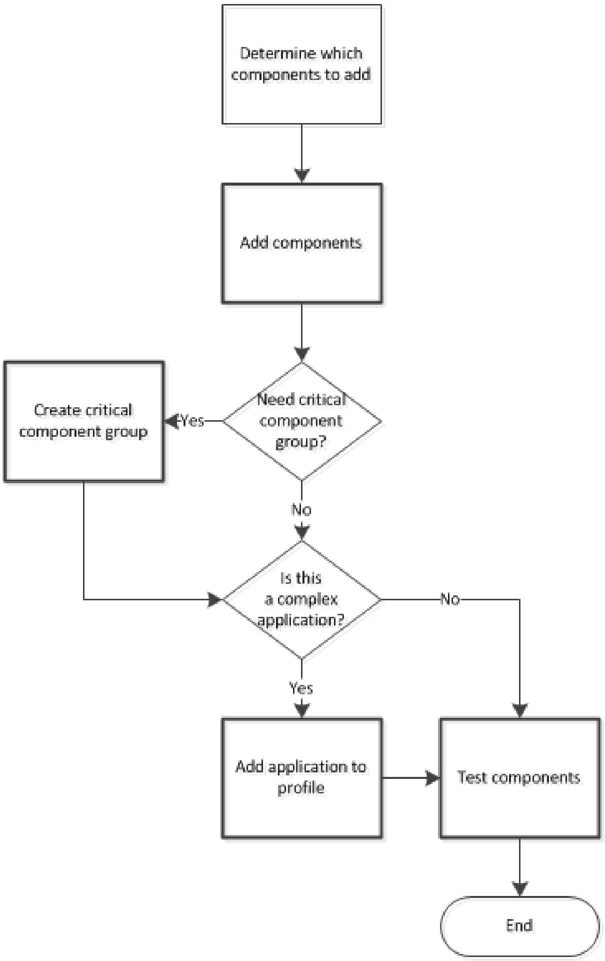

Determine which application to monitor
-OR-
Discover applications
Profile available locally?
No
Profile available on WUGspace?
No
Create application profile
Yes
Import application profile
Yes
Select an application profile to monitor
Profile requires modification?
No
Yes
Modify application profile
Test application profile components
Create Instances
End

Create Application Profile	*Creating a new application profile* (on page 16)
Import Application Profile	*Importing and downloading application profiles* (on page 23)
Discover	*Discovering applications* (on page 8)

Applications	
Modify Application Profile	*Adding components to an application profile* (on page 17) *Adding critical component groups to an application profile* (on page 19) *Adding discrete applications to an application profile* (on page 20)
Test Application Profile	*Testing components* (on page 30)
Create Instance	*Creating an application instance* (on page 102)

Application Components

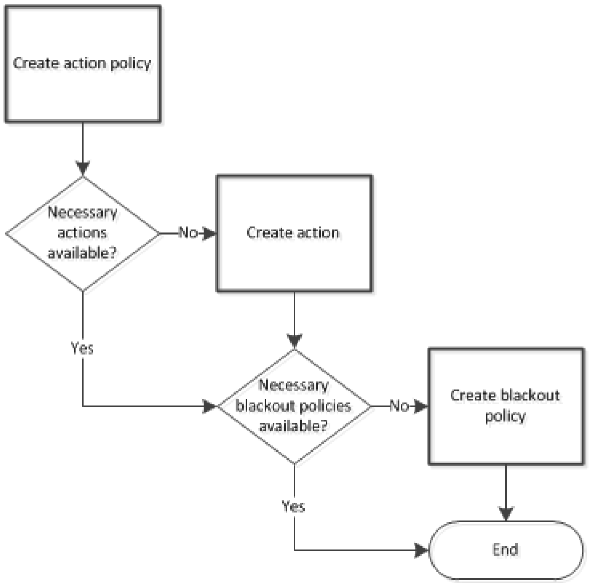
Refer to the table below for step-by-step instructions for each configuration process in the flow chart.


Determine which components to add
Add components
Need critical component group?
Yes
Create critical component group
No
Is this a complex application?
No
Yes
Add application to profile
Test components
End

Add Components	*Adding components* (on page 28)
Create Critical Component Group	*Adding critical component groups to an application profile* (on page 19) *Adding critical component groups to an application instance* (on page 107)
Add Application	*Adding discrete applications to an application profile* (on page 20)
Test Components	*Testing components* (on page 30)

Action Policies

Refer to the table below for step-by-step instructions for each configuration process in the flow chart.



Create Action Policy	*Creating an action policy* (on page 113)
Create Action	*Creating an action* (on page 119)
Create Blackout Policy	*Creating a blackout policy* (on page 131)

APM licensing

Application Performance Monitoring is installed during the WhatsUp Gold installation. Your license determines whether the Application Performance Monitoring plug-in is available in WhatsUp Gold. To update your license for Application Performance Monitoring, visit the *WhatsUp Customer Portal* (http://www.whatsupgold.com/wugCustPortal). Application Performance Monitoring is licensed on a per-component basis. This means that each component that makes up an application instance uses *one license,* since they are each individual components of the application instance. For more information on Application Performance Monitoring licensing or to upgrade your license, click **Details** during the application setup process.

CHAPTER 2

Application Discovery

In This Chapter

Discovering applications

You can discover applications on and create application instances for devices previously added to WhatsUp Gold using APM. To be discoverable, an application must have at least one discoverable service or process component associated with its profile.

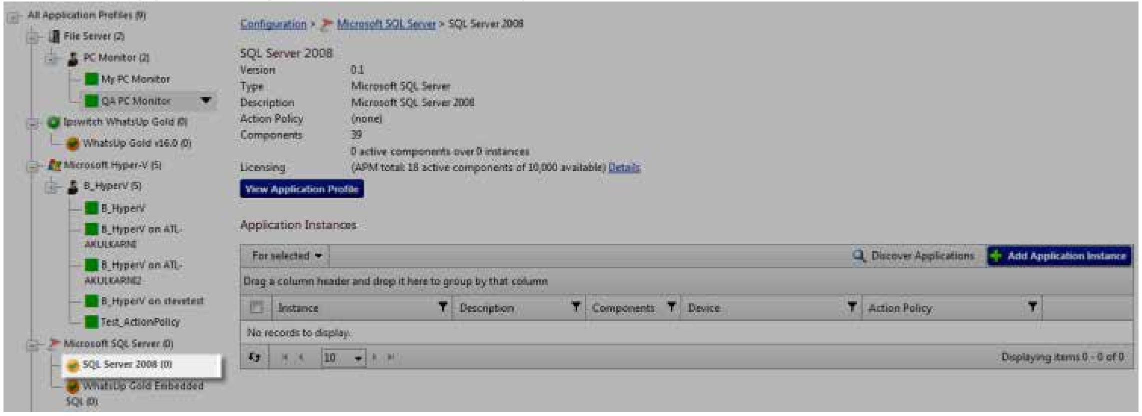
✓ **Important**: Ensure the **Use in discovery** option is selected when adding or editing Windows service or process components within the application profile.

There are three methods to initiate application discovery.

To discover applications using an application profile:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select an application profile from the navigation tree.



SQL Server 2008

Version	0.1
Type	Microsoft SQL Server
Description	Microsoft SQL Server 2008
Action Policy	(none)
Components	39 0 active components over 0 instances
Licensing	(APM total: 18 active components of 10,000 available) Details

Application Instances

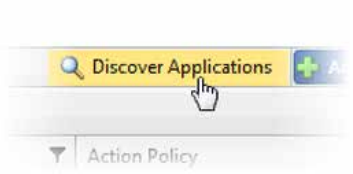
Drag a column header and drop it here to group by that column

□	Instance	Description	Components	Device	Action Policy

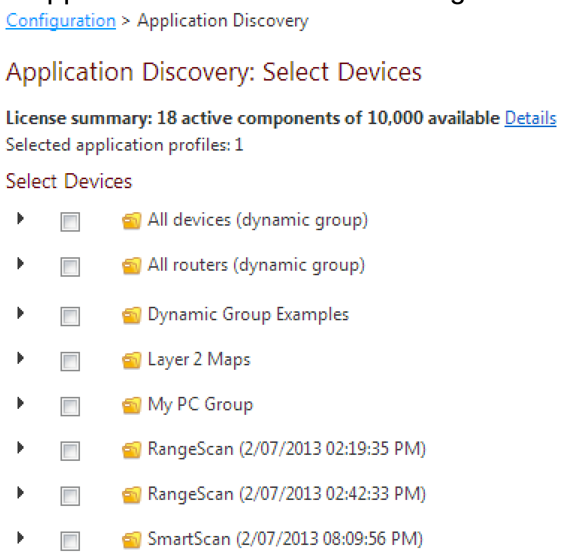
No records to display.

Displaying items 0 - 0 of 0

3 Click **Discover Applications**. A navigation tree appears mirroring your WhatsUp Gold device list which displays dynamic groups and discovery scans.



4 Select the groups and/or devices for which you want to discover applications by clicking the applicable check boxes in the navigation tree.



Configuration > Application Discovery

Application Discovery: Select Devices

License summary: 18 active components of 10,000 available Details

Selected application profiles: 1

Select Devices

□ All devices (dynamic group)

□ All routers (dynamic group)

□ Dynamic Group Examples

□ Layer 2 Maps

□ My PC Group

□ RangeScan (2/07/2013 02:19:35 PM)

□ RangeScan (2/07/2013 02:42:33 PM)

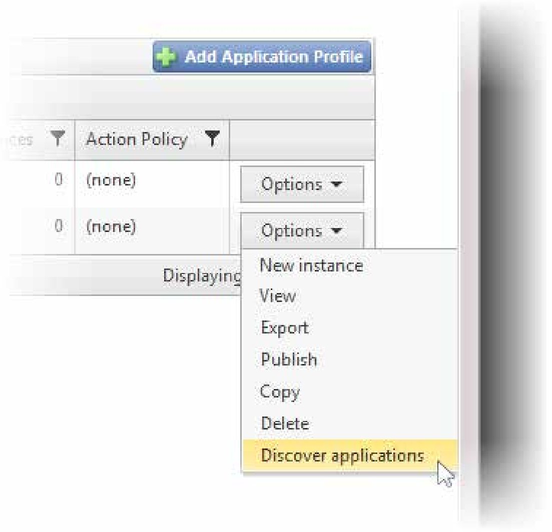
□ SmartScan (2/07/2013 08:09:56 PM)

5 Click **Discover applications**. The Application Discovery: Discovery Results page appears.

To discover applications using an application type:

1 Select an application type from the navigation tree.

2 Select **Discover applications** from the **Options** menu to the right of an existing application profile displayed in the list. A navigation tree appears mirroring your WhatsUp Gold device list which displays dynamic groups and discovery scans.



3 Select the groups and/or devices for which you want to discover applications by clicking the applicable check boxes in the navigation tree.

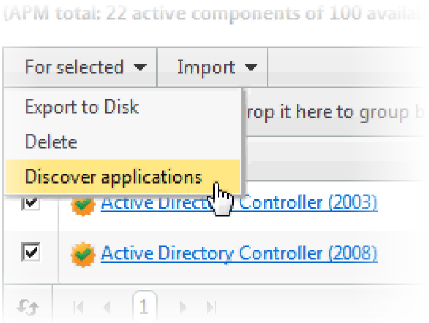
4 Click **Discover applications**. The Application Discovery: Discovery Results page appears.

To discover applications using multiple application profiles:

1 Select an application type in the navigation tree.

2 Click one or more check boxes to the left of the application profiles displayed in the list.

3 Click **Discover applications** from the **For selected** menu at the upper-left corner of the list.


(APM total: 22 active components of 100 availa
For selected
Import
Export to Disk
Delete
Discover applications
rop it here to group b
Active Directory Controller (2003)
☑ Active Directory Controller (2008)
1

4 If a dialog appears indicating, "*Some of the Application Profiles you selected do not have discoverable components and will not be included in the search.*", click **OK**. A navigation tree appears mirroring your WhatsUp Gold device list which shows dynamic groups and discovery scans.

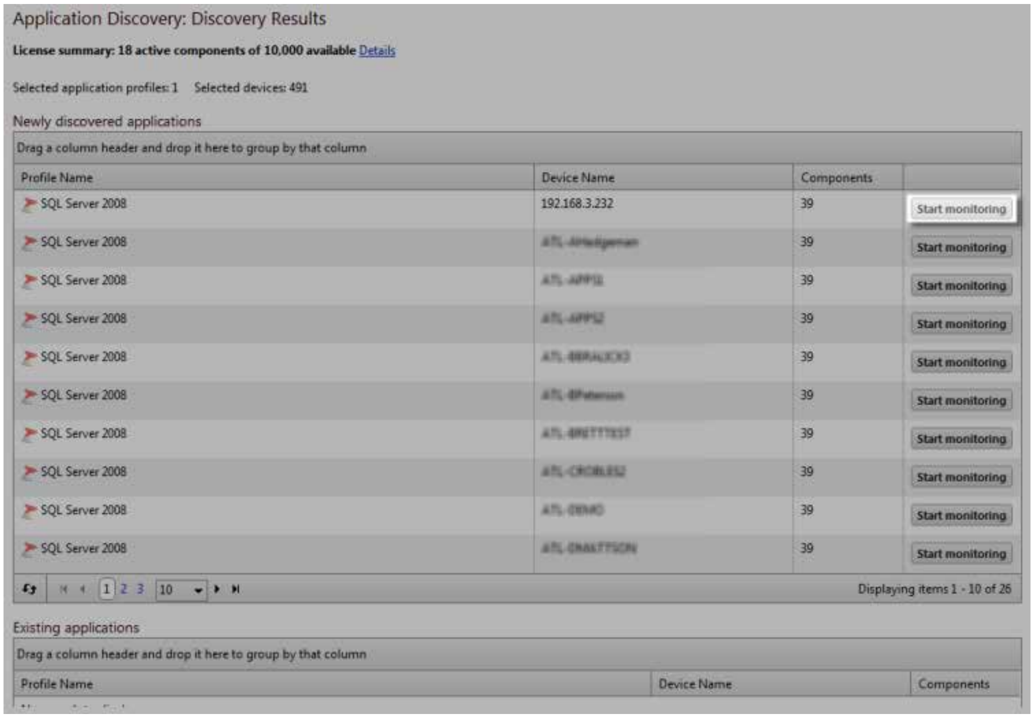
5 Select the groups and/or devices on which you want to discover applications by clicking the applicable check boxes in the navigation tree.

6 Click **Discover applications**. The Application Discovery: Discovery Results page appears.

Once discovered by APM, use the list of newly discovered applications to select which ones to monitor and subsequently create application instances.

To monitor newly-discovered applications:

1 Identify an application on the list you want to begin monitoring and click **Start monitoring**.



Application Discovery: Discovery Results

License summary: 18 active components of 10,000 available Details

Selected application profiles: 1 Selected devices: 491

Newly discovered applications

Drag a column header and drop it here to group by that column

Profile Name	Device Name	Components	
SQL Server 2008	192.168.3.232	39	Start monitoring
SQL Server 2008	[redacted]	39	Start monitoring
SQL Server 2008	[redacted]	39	Start monitoring
SQL Server 2008	[redacted]	39	Start monitoring
SQL Server 2008	[redacted]	39	Start monitoring
SQL Server 2008	[redacted]	39	Start monitoring
SQL Server 2008	[redacted]	39	Start monitoring
SQL Server 2008	[redacted]	39	Start monitoring
SQL Server 2008	[redacted]	39	Start monitoring
SQL Server 2008	[redacted]	39	Start monitoring

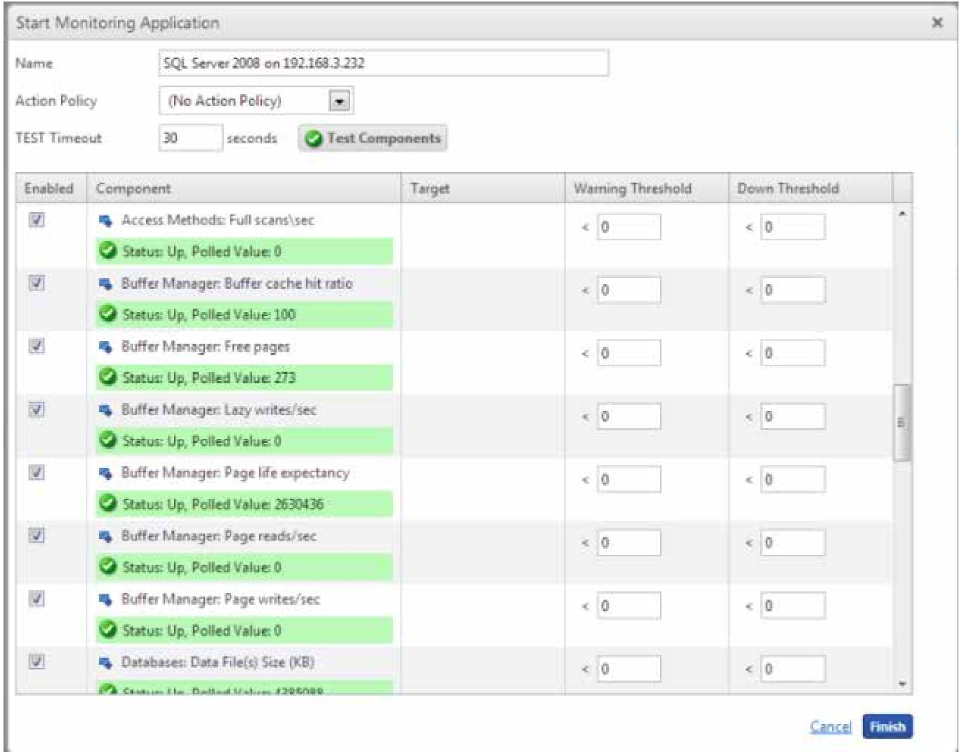
1 2 3 10 Displaying items 1 - 10 of 26

Existing applications

Drag a column header and drop it here to group by that column

Profile Name	Device Name	Components

A Start Monitoring Application dialog appears and APM automatically begins testing the application profile components.



Start Monitoring Application

Name: SQL Server 2008 on 192.168.3.232

Action Policy: (No Action Policy)

TEST Timeout: 30 seconds

Enabled	Component	Target	Warning Threshold	Down Threshold
☑	Access Methods: Full scans\sec Status: Up, Polled Value: 0		< 0	< 0
☑	Buffer Manager: Buffer cache hit ratio Status: Up, Polled Value: 100		< 0	< 0
☑	Buffer Manager: Free pages Status: Up, Polled Value: 273		< 0	< 0
☑	Buffer Manager: Lazy writes/sec Status: Up, Polled Value: 0		< 0	< 0
☑	Buffer Manager: Page life expectancy Status: Up, Polled Value: 2630436		< 0	< 0
☑	Buffer Manager: Page reads/sec Status: Up, Polled Value: 0		< 0	< 0
☑	Buffer Manager: Page writes/sec Status: Up, Polled Value: 0		< 0	< 0
☑	Databases: Data File(s) Size (KB) Status: Up, Polled Value: 4285088		< 0	< 0

2 Use the Start Monitoring Application dialog to make any desired changes to the instance you are creating. The dialog contains the following information:

a) **Name**. Use this box to modify the default name of the application instance.

b) **Action Policy**. Use this list to select an action policy to be applied to the application instance.

c) **TEST Timeout**. Use this box to indicate how long a component test should run prior to timeout.

d) **Test Components**. Use this button to immediately initiate component testing.

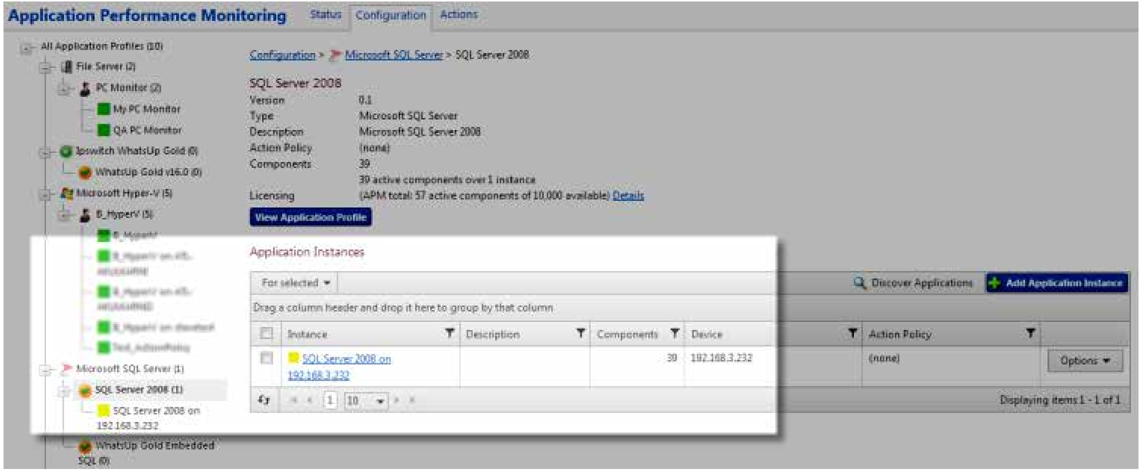
e) **Enabled**. Use these check boxes to enable or disable individual components for the Application instance.

f) **Warning Threshold**. Use this box to indicate when APM reports the component is experiencing a problem.

g) **Down Threshold**. Use this box to indicate when APM reports the component as 'Down'.

3 Click **Finish** to save the application instance.

4 Close the dialog to return to the Application Discovery: Discovery Results page.



SQL Server 2008

Version	0.1
Type	Microsoft SQL Server
Description	Microsoft SQL Server 2008
Action Policy	(none)
Components	39 39 active components over 1 instance
Licensing	(APM total: 57 active components of 10,000 available) Details

Application Instances

Drag a column header and drop it here to group by that column

□	Instance	Description	Components	Device	Action Policy	
□	SQL Server 2008 on 192.168.3.232		39	192.168.3.232	(none)	Options

Displaying items 1 - 1 of 1

5 Repeat as needed to create additional application instances.

CHAPTER 3

APM configuration

In This Chapter

Viewing application performance configuration

The Application Performance Monitoring configuration page allows you to view detailed information about the application profiles currently in use as well as a summary of components, instances, and action policies active for each profile. From here, you can select a specific application profile to view and/or edit.

To access the Application Performance Monitoring Status page, go to **APM > Configuration page**.

On the left of the Configuration page, the Application tree provides a way to determine the scope of the data provided in the right-hand content pane, as well as to provide the status of instances and components. The tree has a root that provides information on All Applications configured for Application Performance Monitoring. Below this root, if configured, there are three levels:

- **Application Type**. Groups application profiles, instances, and components by the type of application (e.g. SQL Server, IIS, Windows 2008 Server).
- **Profile**. Groups the instances and components by the profile used to create the individual instance. Where the data points being monitored are different between two versions of the same application, there may be separate application profiles for each version.
- **Instance**. Groups the components used to monitor the individual data points described in the profile.

To configure Application Profiles, see *Working with application profiles* (on page 15).

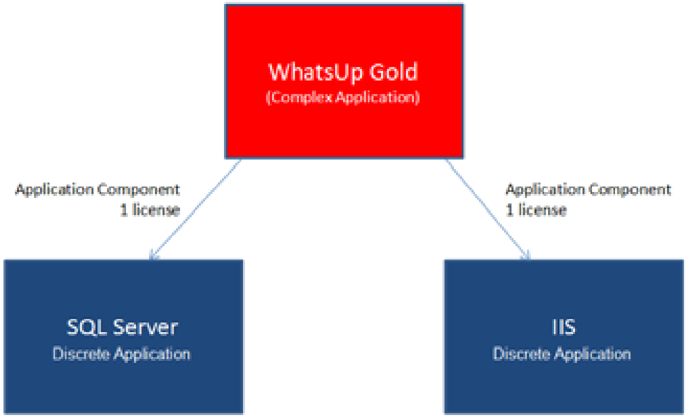
Understanding applications

An application is made up of one or more programs running on one or more monitored systems. Applications can be one of three types:

- **Simple Application**. A simple application is an application that is not dependent on another application to run. Example: Microsoft Server 2008 R2.
- **Complex Application**. A complex application is an application configured to be dependent on one or more applications to run. Example: WhatsUp Gold (requires IIS and SQL Server).
- **Discrete Application**. A discrete application is an application upon which a complex application has a dependency. For example, IIS and SQL Server are discrete applications on which the complex application WhatsUp Gold is dependent. A discrete application is used when you are monitoring a complex application.

For example, if you want to use Application Performance Monitoring to monitor WhatsUp Gold, create an application instance of WhatsUp Gold and add applications that WhatsUp Gold uses, such as SQL Server and IIS as components to the application instance.

Note: Each application component (SQL Server and IIS) uses *one license each* since they are each individual components of an application instance (in this example, WhatsUp Gold).



Learn more about APM terminology (on page 2)

Configuring Application Performance Monitoring to monitor applications

The following table details the objects that you can modify to apply to your specific needs.

Type	Configurable?
Application Type	No
Application profile	No, if Ipswitch provided. Yes, if user-created.
Application instance	Yes, all values are configurable.
Inherited component	No, but certain inherited component values can be overridden.
Stand-alone component	Yes, all values are configurable.
Inherited component group	Only name and description.
Stand-alone component group	Yes, all values are configurable.
Inherited discrete application	No, but certain inherited component values can be overridden in each instance.
Stand-alone discrete application	Yes, all values are configurable.

Working with application profiles

Use the All Application Profiles page to configure new or existing application profiles. *Learn more about APM terminology* (on page 2).

To access the All Application Profiles page from the WhatsUp Gold web interface, go to **APM > Configuration**.

From the All Application Profiles page:

- Click **Add Application Profile** to *create a new application profile* (on page 16).
- Click **Import** to *import an application profile into APM* (on page 23).
- Select **New Instance** from the Options list associated with an application profile to *create an instance from that profile* (on page 102).
- Select **Edit** from the Options list associated with an application profile to *edit the selected application profile* (on page 102).
- Select **Export** from the Options list associated with an application profile to *export an application profile* (on page 25).
- Select **Publish** from the Options list associated with an application profile to *publish an application profile to the WUGSpace Community forums* (on page 26).
- Select **Copy** from the Options list associated with an application profile to create a copy of the selected application profile.
- Select **Delete** from the Options list associated with an application profile to remove an application profile.

Note: Basic application profiles that are downloaded with Application Performance Monitoring cannot be deleted.

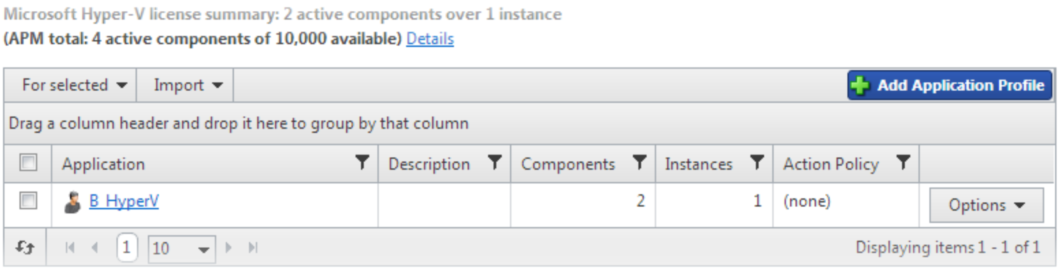
Creating a new application profile

To create a new application profile in APM:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 In the All Application Profiles navigation tree, click the application type for which you want to create a profile. The Configuration page for that application type appears.

3 Click **Add Application Profile**. The Configure New Application Profile page appears.



Microsoft Hyper-V license summary: 2 active components over 1 instance
(APM total: 4 active components of 10,000 available) Details

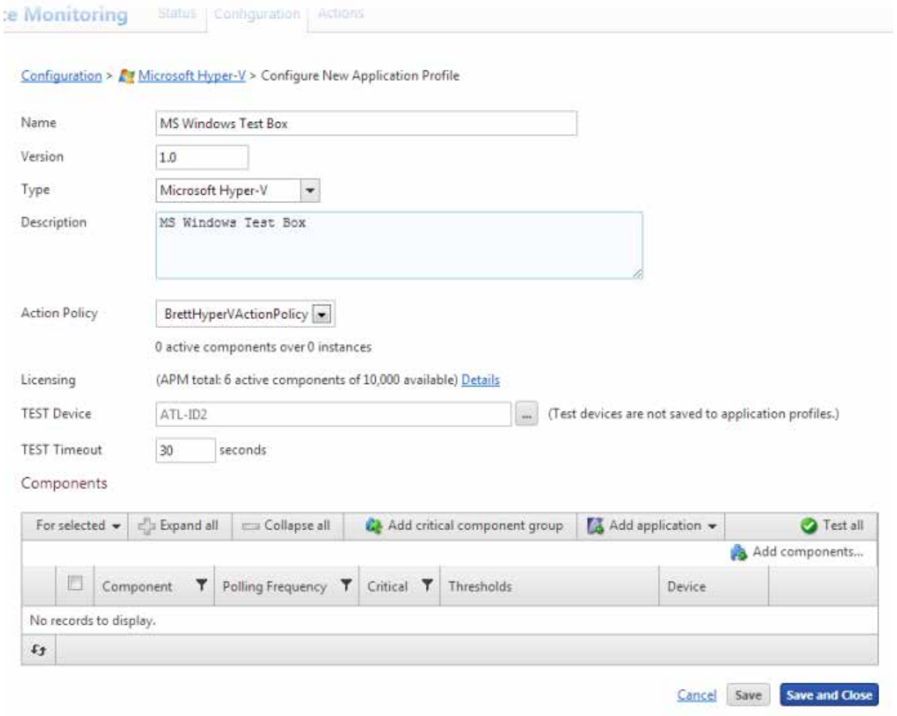
For selected
Import
Add Application Profile
Drag a column header and drop it here to group by that column

□	Application	Description	Components	Instances	Action Policy	
□	B HyperV		2	1	(none)	Options

Displaying items 1 - 1 of 1

4 Enter or select the appropriate information:

- **Name**. Enter a unique name for the application profile.
- **Version**. Enter a version number for the application profile.
- **Type**. Select the type of application from the list of preconfigured applications types.
- **Description**. (Optional) Enter additional information about the application profile.
- **Action Policy**. Select an action policy for the application profile.
- **TEST Device**. Click browse (**...**) to select a device to test the application profile settings.



Configuration > Microsoft Hyper-V > Configure New Application Profile

Name: MS Windows Test Box
Version: 1.0
Type: Microsoft Hyper-V
Description: MS Windows Test Box
Action Policy: BrettHyperVActionPolicy
0 active components over 0 instances
Licensing: (APM total: 6 active components of 10,000 available) Details
TEST Device: ATL-ID2 ... (Test devices are not saved to application profiles.)
TEST Timeout: 30 seconds

Components

□	Component	Polling Frequency	Critical	Thresholds	Device

No records to display.

Note: Clicking browse (**...**) allows you to test the configuration settings of an application profile, but does not save the device to the application profile.

5 (Optional) Click **Add components** to *add a component to the application profile* (on page 17).

6 (Optional) Click **Add critical component group** to *add a critical component group to the application profile* (on page 19).

7 (Optional) Click **Add application** to *add a discrete application to the application profile* (on page 20).

8 (Optional) Click **Test all** to test all of the components added to the application profile.

9 Click **Save** to save your changes or click **Save and Close** to complete your changes.

Adding components to an application profile

A component is a single data point that is collected as part of an application profile. For example, the CPU Utilization component.

APM is licensed on a per-component basis, meaning that each component monitored uses one license. However, adding components to an application profile does not consume a license. A license is only consumed when a component is used by an *application instance* (on page 102). *Learn more about APM terminology* (on page 2).

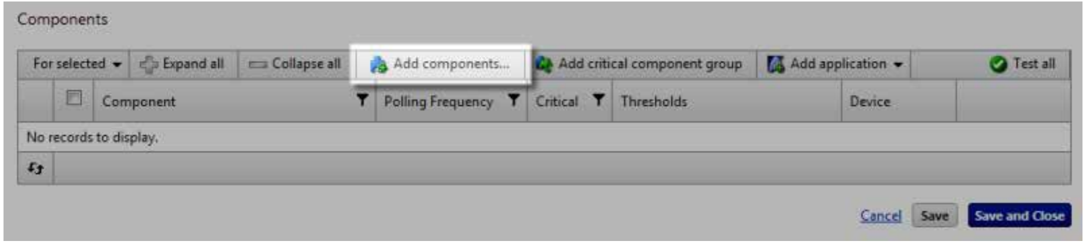
Note: Applications as a whole can be components of another application (i.e. complex application).

To add a component to an existing application profile:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

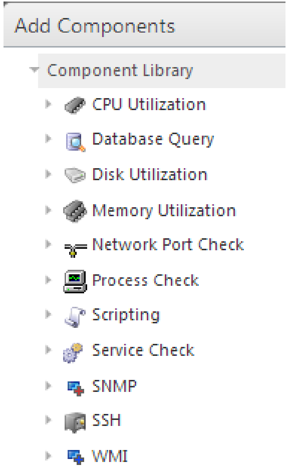
2 Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.

3 In the Components section, click **Add components**.

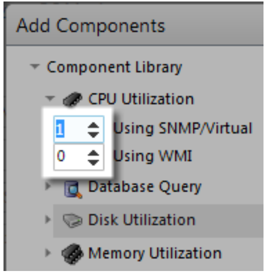


No records to display.

The Component Library appears.



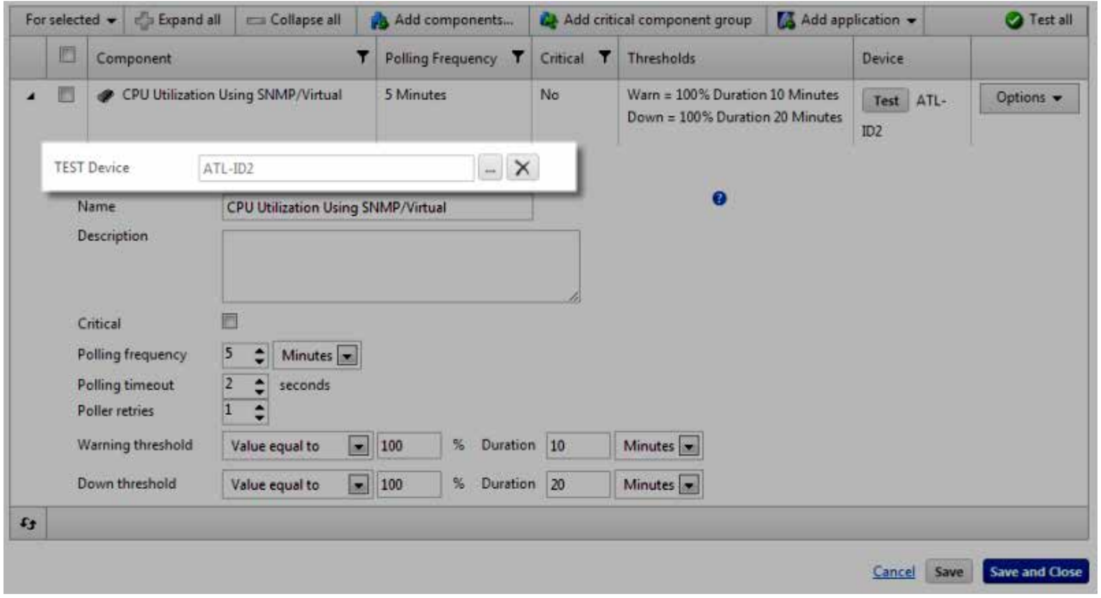
4 Click the arrow next to a component category to expand, then specify the number of that component you want to add by either entering a number into the box or by clicking the up and down arrows next to the component.



Note: You can add up to 10 components at a time to an application profile. If you need more than 10 components, click **Add components** again to add more components.

5 Click **Add selected**.

6 (Optional) Select a specific device on which to test the component (other than the test device associated with the application profile) and click **Test**.



	Component	Polling Frequency	Critical	Thresholds	Device	
□	CPU Utilization Using SNMP/Virtual	5 Minutes	No	Warn = 100% Duration 10 Minutes Down = 100% Duration 20 Minutes	Test ATL-ID2	Options

TEST Device: ATL-ID2

Name: CPU Utilization Using SNMP/Virtual

Description:

Critical: □

Polling frequency: 5 Minutes

Polling timeout: 2 seconds

Poller retries: 1

Warning threshold: Value equal to 100 % Duration 10 Minutes

Down threshold: Value equal to 100 % Duration 20 Minutes

7 Enter or select the appropriate information into each of the component boxes. For more information about configuring specific components, see *Component box configuration options* (on page 158).

8 Click **Save** to save your changes or click **Save and Close** to complete your changes.

Adding critical component groups to an application profile

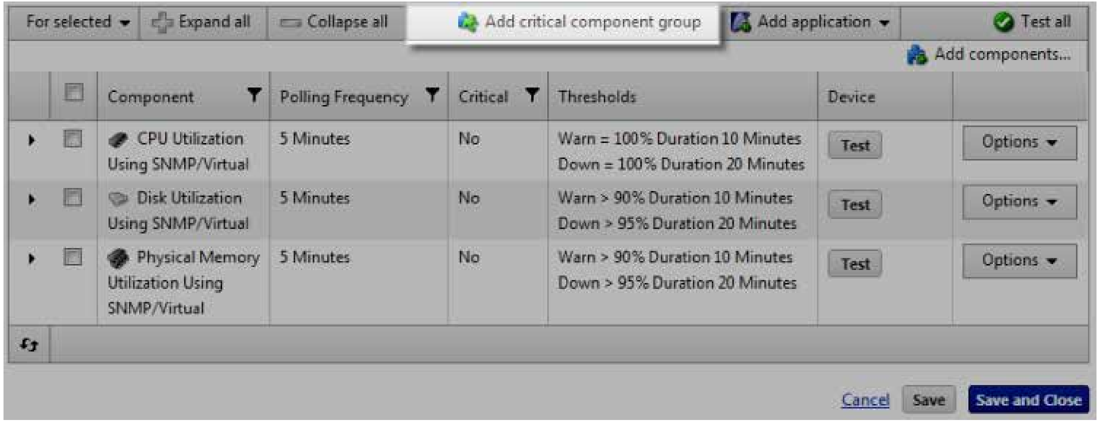
There must be at least two components included in a critical component group. For more information, see *Working with critical component groups* (on page 104).

To add a critical component group to an application profile:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

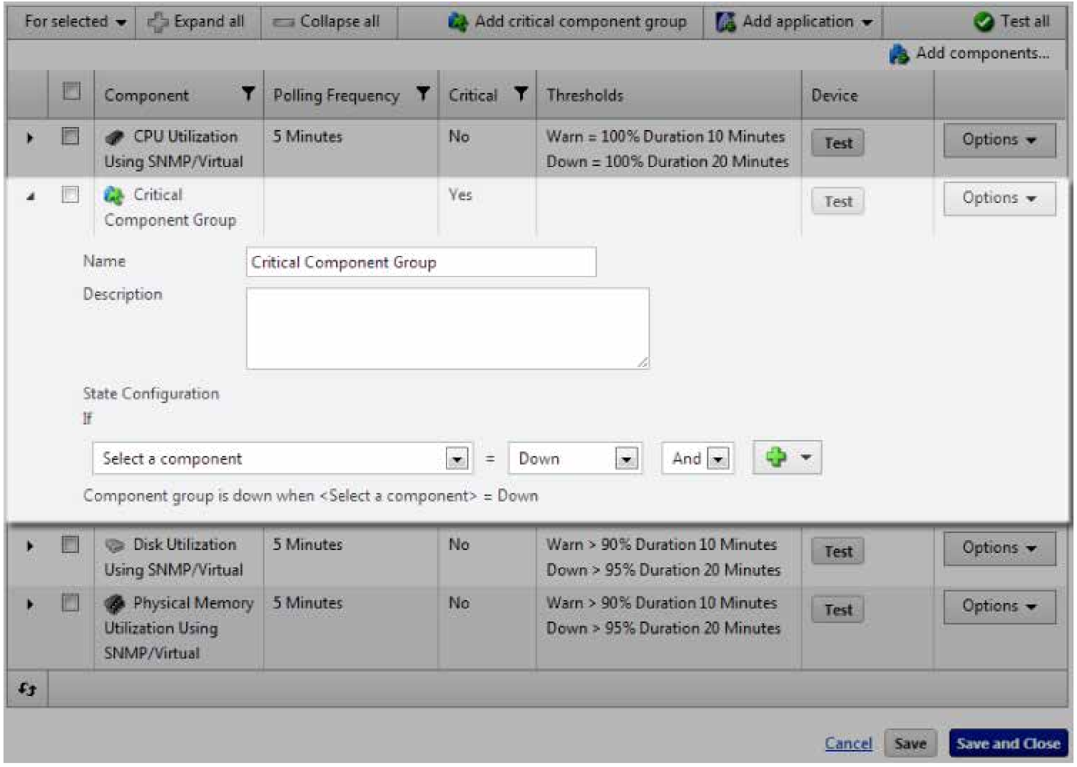
2 Select the application profile for which you want to add a critical component group, then click **Edit/View Application Profile**. The Components list appears.

3 In the Components section, click **Add critical component group**.



	Component	Polling Frequency	Critical	Thresholds	Device	
□	CPU Utilization Using SNMP/Virtual	5 Minutes	No	Warn = 100% Duration 10 Minutes Down = 100% Duration 20 Minutes	Test	Options
□	Disk Utilization Using SNMP/Virtual	5 Minutes	No	Warn > 90% Duration 10 Minutes Down > 95% Duration 20 Minutes	Test	Options
□	Physical Memory Utilization Using SNMP/Virtual	5 Minutes	No	Warn > 90% Duration 10 Minutes Down > 95% Duration 20 Minutes	Test	Options

The Critical Component Group information appears.



	☐	Component	Polling Frequency	Critical	Thresholds	Device
▸	☐	CPU Utilization Using SNMP/Virtual	5 Minutes	No	Warn = 100% Duration 10 Minutes Down = 100% Duration 20 Minutes	Test
◂	☐	Critical Component Group		Yes		Test
▸	☐	Disk Utilization Using SNMP/Virtual	5 Minutes	No	Warn > 90% Duration 10 Minutes Down > 95% Duration 20 Minutes	Test
▸	☐	Physical Memory Utilization Using SNMP/Virtual	5 Minutes	No	Warn > 90% Duration 10 Minutes Down > 95% Duration 20 Minutes	Test

Name: Critical Component Group

Description:

State Configuration

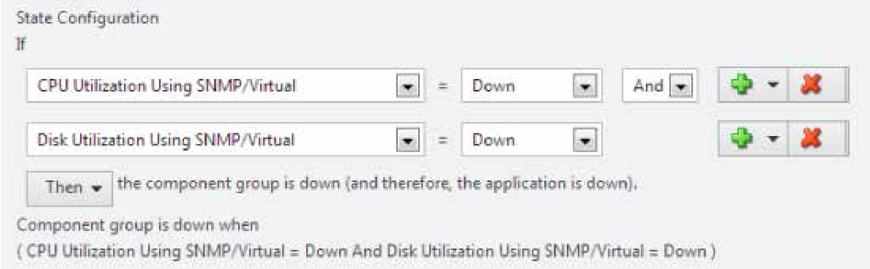
If

Select a component = Down And

Component group is down when <Select a component> = Down

4 Enter or select the appropriate information:

- **Name**. Enter a unique name for the critical component group.
- **Description**. (Optional) Enter additional information about the critical component group.
- **State Configuration**. Select a configuration for the critical component group. For example, if CPU Utilization component is down and the Disk Utilization component is down, then the component group is down.



State Configuration

If

CPU Utilization Using SNMP/Virtual = Down And

Disk Utilization Using SNMP/Virtual = Down

Then the component group is down (and therefore, the application is down).

Component group is down when

(CPU Utilization Using SNMP/Virtual = Down And Disk Utilization Using SNMP/Virtual = Down)

5 Click **Save** to save your changes or click **Save and Close** to complete your changes.

Learn more about APM terminology (on page 2)

Adding discrete applications to an application profile

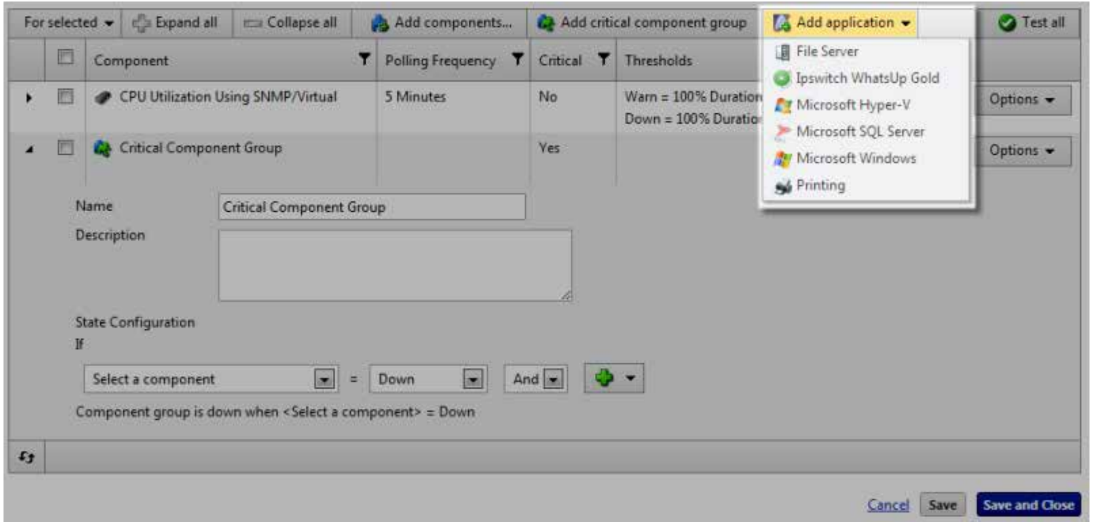
A discrete application is an application upon which a complex application has a dependency. For example, IIS and SQL Server are discrete applications on which the complex application WhatsUp Gold is dependent. A discrete application is used when you are monitoring a complex application. *Learn more about APM terminology* (on page 2).

To add a discrete application to an application profile:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application profile for which you want to add a critical component group, then click **Edit/View Application Profile**. The Components list appears.

3 In the Components section, click **Add application**, then select an application profile type from the list.



Component	Polling Frequency	Critical	Thresholds

CPU Utilization Using SNMP/Virtual	5 Minutes	No	Warn = 100% Duration
			Down = 100% Duratio

Critical Component Group		Yes	

Name: Critical Component Group

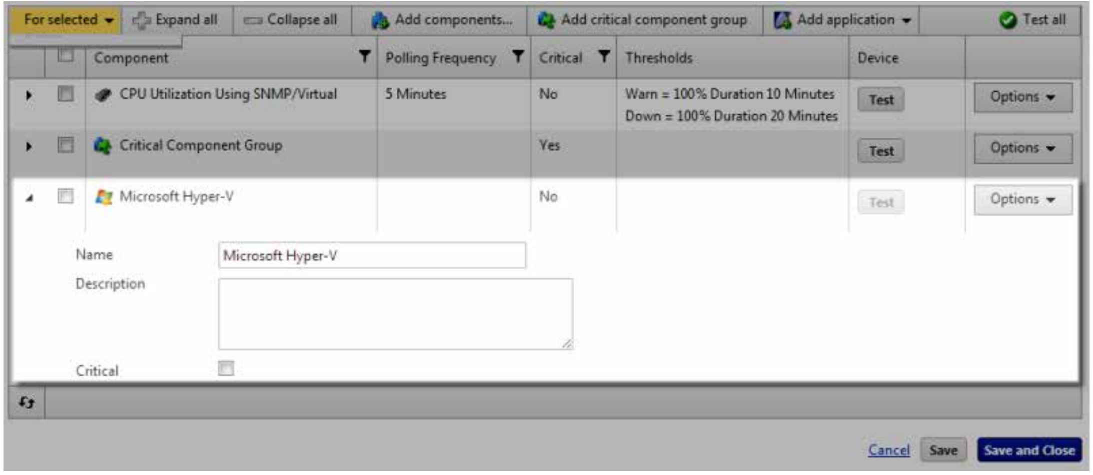
Description:

State Configuration

If Select a component = Down And

Component group is down when <Select a component> = Down

The discrete application appears in the Components section.



Component	Polling Frequency	Critical	Thresholds	Device

CPU Utilization Using SNMP/Virtual	5 Minutes	No	Warn = 100% Duration 10 Minutes
			Down = 100% Duration 20 Minutes
				Test

Critical Component Group		Yes		Test
Microsoft Hyper-V		No		Test

Name: Microsoft Hyper-V

Description:

Critical □

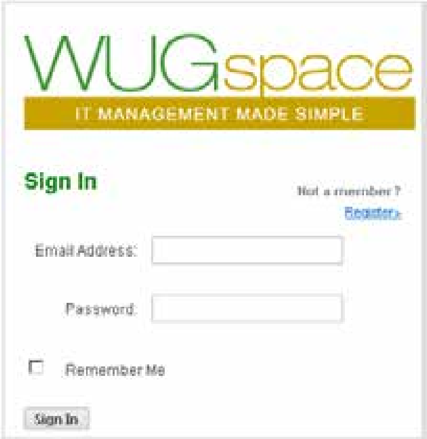
4 Enter or select the appropriate information:

- **Name**. Enter a unique name for the discrete application.
- **Description**. (Optional) Enter additional information about the discrete application.
- **Critical**. Select this option if the discrete application is critical.

5 Click **Save** to save your changes or click **Save and Close** to complete your changes.

Setting up a WUGSpace user account

All WhatsUp Gold APM online interactions, such as downloading or sharing profiles, are done in the context of a *WUGSpace Community* (http://www.whatsupgold.com/WUGProfilesInfo) user, therefore the first thing WhatsUp Gold users see when trying to download, import, or publish an application profile is the WUGSpace login screen.



The login screen provides an option to register if you have not previously been a part of the *WUGSpace Community* (http://www.whatsupgold.com/WUGProfilesInfo). The registration process is completed outside of WhatsUp Gold on the *WUGSpace Community* (http://www.whatsupgold.com/WUGProfilesInfo) website. The registration process generates an email to verify before completing the registration and acquiring a new account. Follow the onscreen instructions to complete the process.

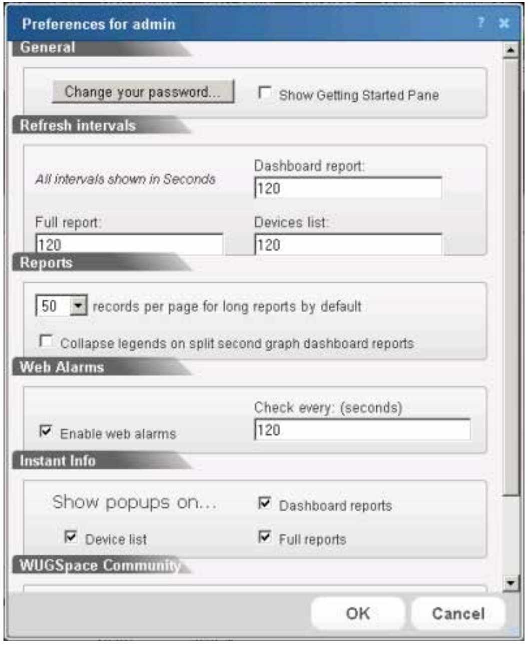
After the WUGSpace Community registration is complete, you can login to the community via the WhatsUp Gold application dialog when prompted.

Storing your WUGSpace Community password in WhatsUp Gold

If preferred, you can manage and save your WUGSpace Community user credentials in the **Admin > Preferences** dialog. If your enter your community credentials in this dialog, they will be saved and used to automatically log into the community each time you download, import, or publish application profiles in WhatsUp Gold Application Performance Monitoring.

To store you WUGSpace Community password:

1 Access the Preferences dialog, go to **Admin > Preferences**. The Preference for admin dialog appears.



□ Show Getting Started Pane

All intervals shown in Seconds

Dashboard report: 120

Full report: 120

Devices list: 120

50 records per page for long reports by default

□ Collapse legends on split second graph dashboard reports

☑ Enable web alarms

Check every: (seconds) 120

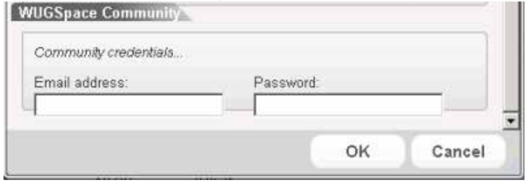
Show popups on...

☑ Dashboard reports

☑ Device list

☑ Full reports

2 Enter your WUGSpace Community user credentials, then click **OK**.



Community credentials...

Email address:

Password:

Importing and downloading application profiles

Application Performance Monitoring (APM) works seamlessly with the *WUGSpace Community* (http://www.whatsupgold.com/WUGProfilesInfo) to promote application profile sharing with members of the community. Importing adds the profile(s) directly to the WhatsUp Gold database and downloading stores the profile(s) on the local drive for future import or inspection. Profiles that are imported/downloaded into WhatsUp Gold are stored in an XML file. Application profiles that are released by Ipswitch are identified with the ✓ icon and cannnot be modified.

In order to import or download application profiles from the WUGSpace Community forums, you need an internet connection and a WUGSpace user account. For more information see, *Setting up a WUGSpace user account* (on page 21).

The following import and download steps are included below:

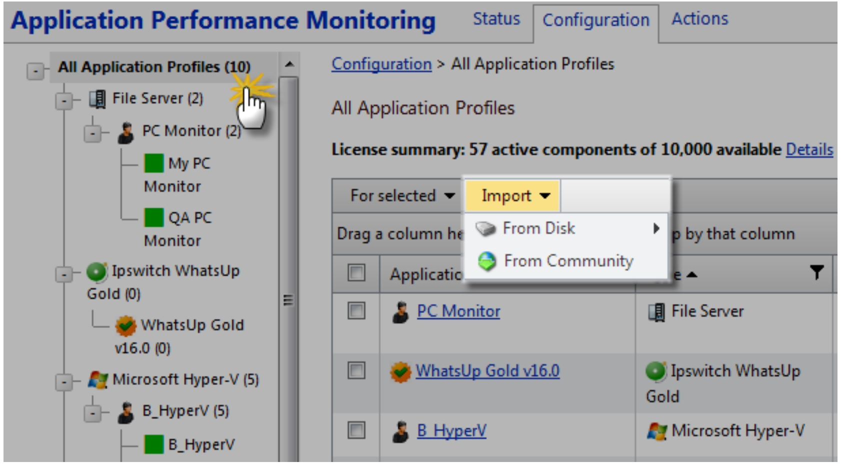
- Import application profiles into APM from the *WUGSpace Community* (http://www.whatsupgold.com/WUGProfilesInfo) forums
- Download application profiles to your computer from the *WUGSpace Community* (http://www.whatsupgold.com/WUGProfilesInfo) forums
- Import customized application profiles into APM from your computer (disk)

To import an application profile into APM from the WUGSpace Community:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Click **All Application Profiles**.

3 Click **Import > From Community**.



Application Performance Monitoring | Status | Configuration | Actions

- All Application Profiles (10)
  - File Server (2)
    - PC Monitor (2)
      - My PC Monitor
      - QA PC Monitor
  - Ipswitch WhatsUp Gold (0)
    - WhatsUp Gold v16.0 (0)
  - Microsoft Hyper-V (5)
    - B_HyperV (5)
      - B_HyperV

Configuration > All Application Profiles

All Application Profiles

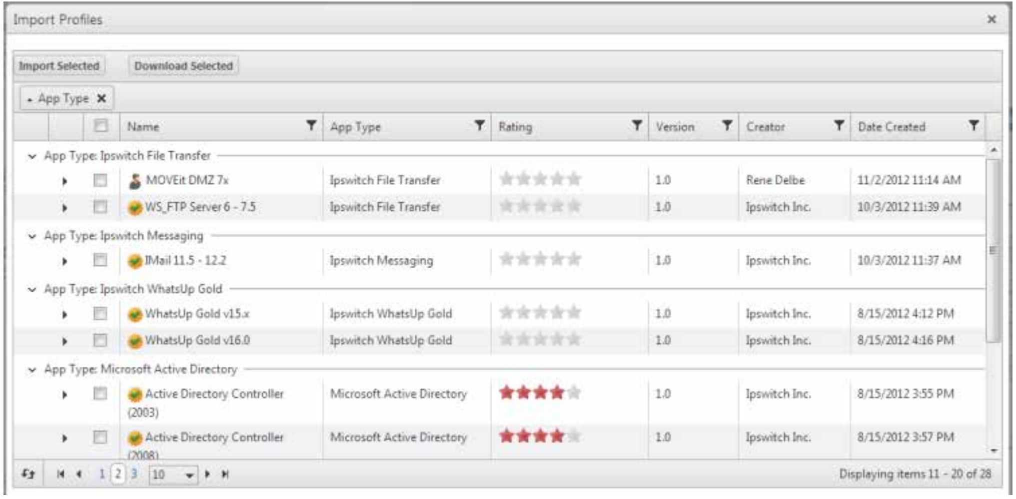
License summary: 57 active components of 10,000 available Details

For selected ▾ | Import ▾ | From Disk ▸ | From Community

Drag a column he[...]p by that column

□	Applicatio[...]	[...]e ▲
□	PC Monitor	File Server
□	WhatsUp Gold v16.0	Ipswitch WhatsUp Gold
□	B_HyperV	Microsoft Hyper-V

If required, enter your WUGSpace credentials, then click **Sign In**. The Import Profiles page appears.



Import Profiles ×

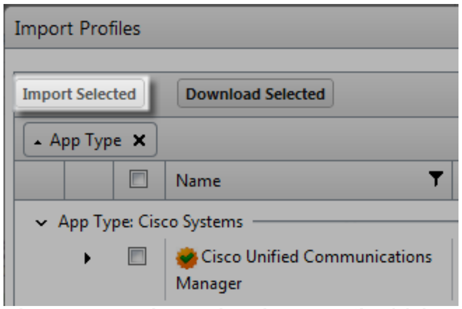
Import Selected | Download Selected

App Type ×

	□	Name	App Type	Rating	Version	Creator	Date Created
App Type: Ipswitch File Transfer							
▸	□	MOVEit DMZ 7x	Ipswitch File Transfer	☆☆☆☆☆	1.0	Rene Delbe	11/2/2012 11:14 AM
▸	□	WS_FTP Server 6 - 7.5	Ipswitch File Transfer	☆☆☆☆☆	1.0	Ipswitch Inc.	10/3/2012 11:39 AM
App Type: Ipswitch Messaging							
▸	□	IMail 11.5 - 12.2	Ipswitch Messaging	☆☆☆☆☆	1.0	Ipswitch Inc.	10/3/2012 11:37 AM
App Type: Ipswitch WhatsUp Gold							
▸	□	WhatsUp Gold v15.x	Ipswitch WhatsUp Gold	☆☆☆☆☆	1.0	Ipswitch Inc.	8/15/2012 4:12 PM
▸	□	WhatsUp Gold v16.0	Ipswitch WhatsUp Gold	☆☆☆☆☆	1.0	Ipswitch Inc.	8/15/2012 4:16 PM
App Type: Microsoft Active Directory							
▸	□	Active Directory Controller (2003)	Microsoft Active Directory	★★★★☆	1.0	Ipswitch Inc.	8/15/2012 3:55 PM
▸	□	Active Directory Controller (2008)	Microsoft Active Directory	★★★★☆	1.0	Ipswitch Inc.	8/15/2012 3:57 PM

1 2 3 | 10 ▾ | Displaying items 11 - 20 of 28

4 Click to select the check box for each profile you would like to upload, then click **Import Selected**.



Import Profiles

Import Selected | Download Selected

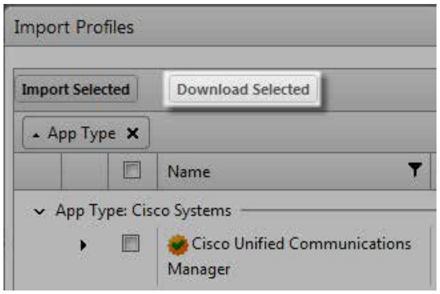
App Type ×

	□	Name
App Type: Cisco Systems		
▸	□	Cisco Unified Communications Manager

The selected application profile(s) import into APM and are available under the All Application Profiles tree on the configuration page.

To download an application profile to your computer from the WUGSpace Community:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Click **All Application Profiles**.
3. Click **Import > From Community**. If required, enter your WUGSpace credentials, then click **Sign In**. The Import Profiles page appears.
4. Click to select the check box for each profile you would like to download, then click **Download Selected** to download the application profile to your computer.



The selected application profile(s) downloads to the local computer.

5. To import the application profile downloaded on your computer, go to the steps *To import an application profile into APM from your computer*.

To import an application profile into APM from your computer:

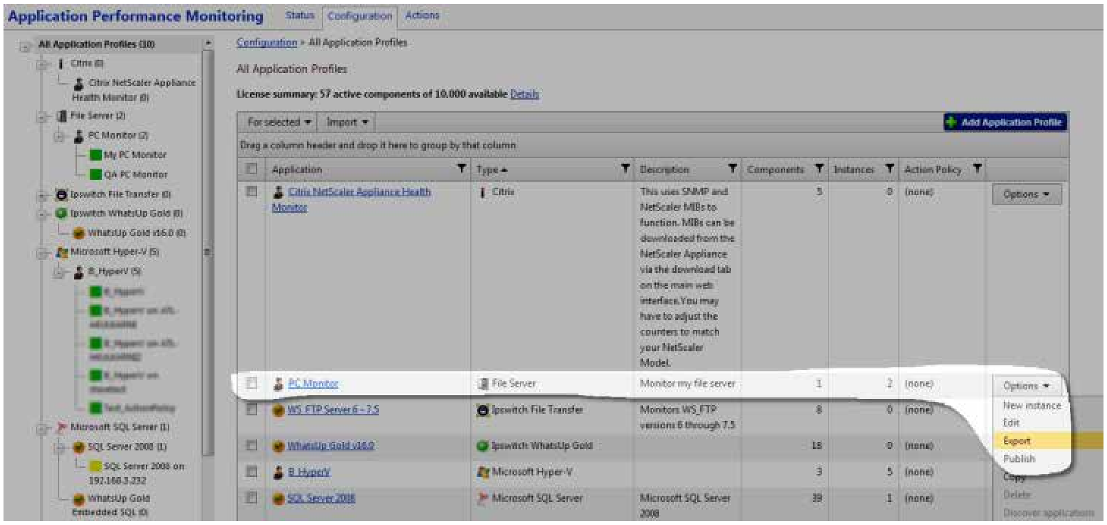
1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Click **All Application Profiles**.
3. Click **Import > From Disk**, then click **Select**.
4. Navigate to the profile `.xml` file on the system, then click **Open**. The application profile imports into APM.

Exporting an application profile

Application Performance Monitoring (APM) allows you to export your application profiles to your computer (disk). If an online connection to the internet is unavailable, then application profile XML files can be exported and imported to and from a local hard drive.

To export an application profile from APM:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Click **All Application Profiles**.
3. From the list of application profiles, select the profile you want to publish, then click **Options > Export**.


Application Performance Monitoring
Status
Configuration
Actions
All Application Profiles (10)
Citrix (0)
Citrix NetScaler Appliance Health Monitor (0)
File Server (2)
PC Monitor (2)
My PC Monitor
QA PC Monitor
Ipswitch File Transfer (0)
Ipswitch WhatsUp Gold (0)
WhatsUp Gold v16.0 (0)
Microsoft Hyper-V (5)
B_HyperV (5)
Microsoft SQL Server (1)
SQL Server 2008 (1)
SQL Server 2008 on 192.168.3.232
WhatsUp Gold Embedded SQL (0)
Configuration > All Application Profiles
For selected
Import
Add Application Profile
Drag a column header and drop it here to group by that column
Options
New instance
Edit
Export
Publish
Copy
Delete
Discover applications

All Application Profiles

License summary: 57 active components of 10.000 available Details

Application	Type	Description	Components	Instances	Action Policy
Citrix NetScaler Appliance Health Monitor	Citrix	This uses SNMP and NetScaler MIBs to function. MIBs can be downloaded from the NetScaler Appliance via the download tab on the main web interface.You may have to adjust the counters to match your NetScaler Model.	5	0	(none)
PC Monitor	File Server	Monitor my file server	1	2	(none)
WS_FTP Server 6 - 7.5	Ipswitch File Transfer	Monitors WS_FTP versions 6 through 7.5	8	0	(none)
WhatsUp Gold v16.0	Ipswitch WhatsUp Gold		18	0	(none)
B_HyperV	Microsoft Hyper-V		3	5	(none)
SQL Server 2008	Microsoft SQL Server	Microsoft SQL Server 2008	39	1	(none)

The Export option triggers the browser to download the `.xml` file to the local file system.

4 Locate the `.xml` file on the local file system. The file can be transferred to another system and imported using **Import > From Disk**. For more information, see *Importing and downloading application profiles* (on page 23).

Publishing an application profile to WUGSpace

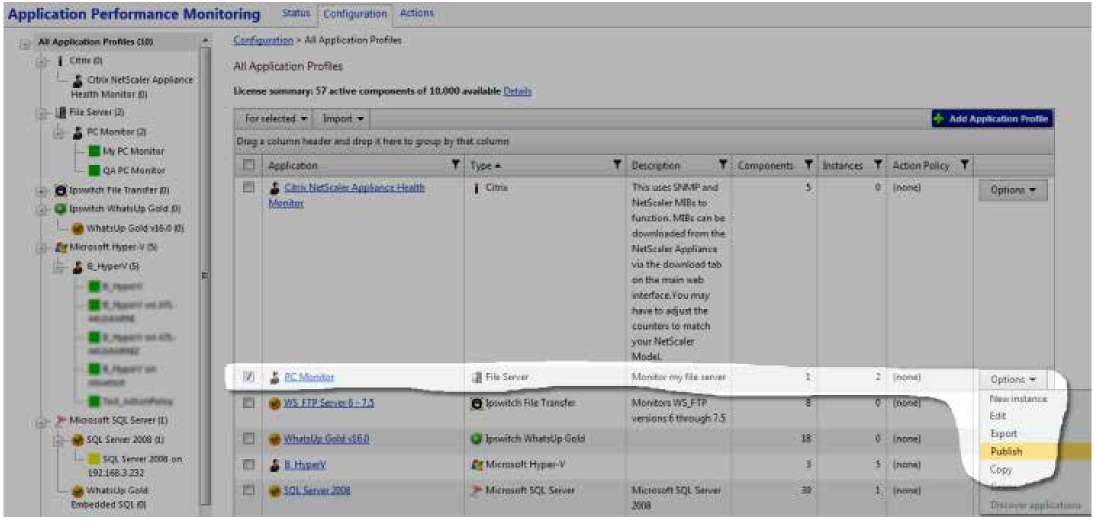
Application Performance Monitoring (APM) also allows you to share your application profiles with other members of the WUGSpace community. Before publishing, you must provide information in the Publish Application Profile dialog.

To publish an application profile to the WUGSpace Community:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Click **All Application Profiles**.

3 From the list of application profiles, select the profile you want to publish, then select **Options > Publish**.

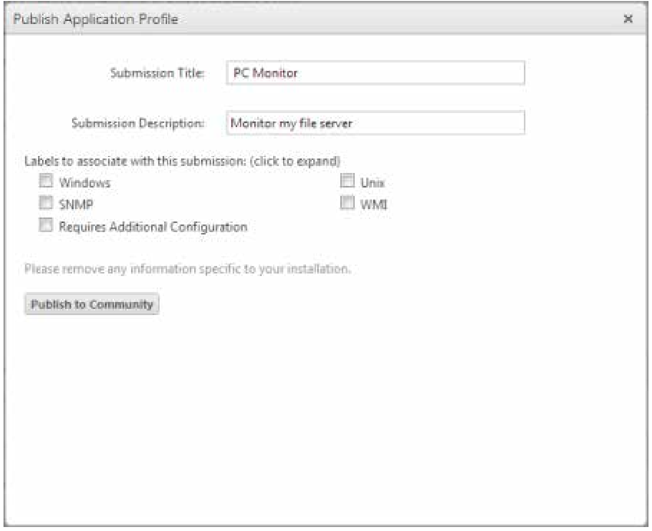

Application Performance Monitoring
Status
Configuration
Actions
All Application Profiles (10)
Citrix (0)
Citrix NetScaler Appliance Health Monitor (0)
File Server (2)
PC Monitor (2)
My PC Monitor
QA PC Monitor
Ipswitch File Transfer (0)
Ipswitch WhatsUp Gold (0)
WhatsUp Gold v16.0 (0)
Microsoft Hyper-V (5)
B_HyperV (5)
Microsoft SQL Server (1)
SQL Server 2008 (1)
SQL Server 2008 on 192.168.3.232
WhatsUp Gold Embedded SQL (0)
Configuration > All Application Profiles
For selected
Import
Add Application Profile
Drag a column header and drop it here to group by that column
Options
New instance
Edit
Export
Publish
Copy
Discover applications

All Application Profiles

License summary: 57 active components of 10.000 available Details

Application	Type	Description	Components	Instances	Action Policy
Citrix NetScaler Appliance Health Monitor	Citrix	This uses SNMP and NetScaler MIBs to function. MIBs can be downloaded from the NetScaler Appliance via the download tab on the main web interface.You may have to adjust the counters to match your NetScaler Model.	5	0	(none)
☑ PC Monitor	File Server	Monitor my file server	1	2	(none)
WS_FTP Server 6 - 7.5	Ipswitch File Transfer	Monitors WS_FTP versions 6 through 7.5	8	0	(none)
WhatsUp Gold v16.0	Ipswitch WhatsUp Gold		18	0	(none)
B_HyperV	Microsoft Hyper-V		3	5	(none)
SQL Server 2008	Microsoft SQL Server	Microsoft SQL Server 2008	39	1	(none)

If you have not signed into the WUGSpace Community, enter your WUGSpace credentials into each box, then click **Sign In**. The Publish Application Profile dialog appears.



Submission Title: PC Monitor

Submission Description: Monitor my file server

Labels to associate with this submission: (click to expand)

□ Windows □ Unix
□ SNMP □ WMI
□ Requires Additional Configuration

Please remove any information specific to your installation.

4 Enter the appropriate information:
The Submission Title and Submission Description result in the Name and Description of the XML file that is downloaded from the community.

- **Submission Title**. Enter a name for the application profile. This name is used to identify the application profile in the WUGSpace Community.
- **Submission Description**. (Optional) Enter additional information about the application profile. This information is used to identify the application profile in the WUGSpace Community.

5 Click **Publish to Community**. The profile is published to the WUGSpace Community.

Working with components

A component is a single data point that is collected as part of an application profile. Example: CPU Utilization. Application Performance Monitoring is licensed on a per-component basis, meaning that each component monitored uses *one* license. However, adding components to an application profile does not consume a license. A license is only consumed when a component is added to an application instance. *Learn more about APM terminology* (on page 2).

Note: Applications as a whole can be components of another application (i.e. discrete application).

The following components are available for use in APM:

- *CPU Utilization* (on page 33)
- Database Query - *MySQL* (on page 35), *Oracle* (on page 38), *SQL Server* (on page 40)
- *Disk Utilization* (on page 42)

- Memory Utilization - *Physical* (on page 45), *Virtual* (on page 47)
- Network Port Checks - *Custom* (on page 49), *Echo* (on page 51), *FTP* (on page 53), *HTTP* (on page 55), *HTTPS* (on page 58), *IMAP4* (on page 60), *NNTP* (on page 62), *POP3* (on page 64), *Radius* (on page 67), *SMTP* (on page 69), *Time* (on page 71)
- Process Check - *SNMP* (on page 73), *WMI* (on page 75)
- Scripting - *PowerShell* (on page 77)
- Service Check - *SNMP* (on page 86), *WMI* (on page 88)
- *SNMP* (on page 90)
- SSH - *Active* (on page 93), *Performance* (on page 94)
- WMI - *Formatted* (on page 97), *Raw* (on page 99)

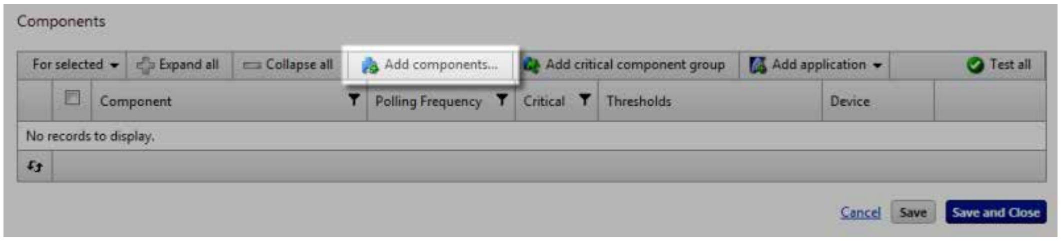
Adding components to an application instance

To add a component to an application profile, see *Adding components to an application profile* (on page 17).

To add a component to an application instance:

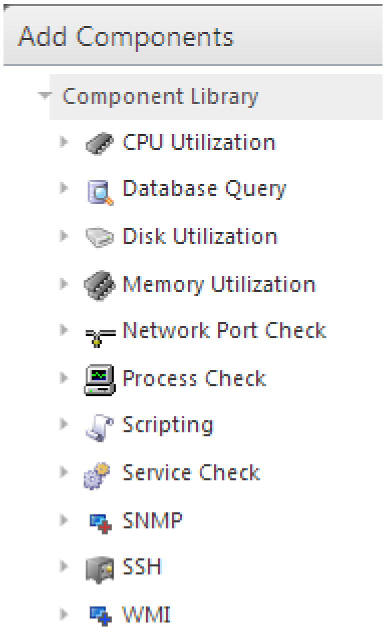
1 *Create an application instance* (on page 102) from a preconfigured application profile.

2 In the Components section, click **Add components**.

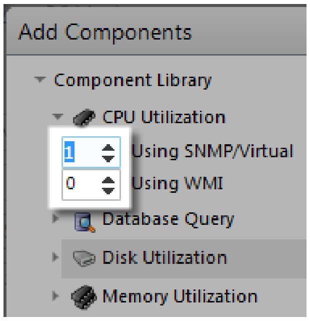


No records to display.

The Component Library appears.



3. Click the arrow next to a component category to expand, then specify the number of components you want to add by entering a number into the box or by clicking the up and down arrows next to the component.

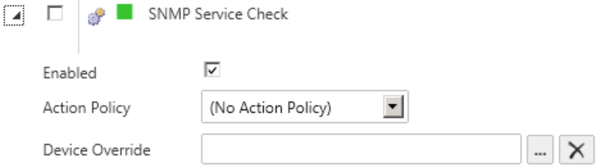


Add Components

- Component Library
  - CPU Utilization
    - 1 Using SNMP/Virtual
    - 0 Using WMI
  - Database Query
  - Disk Utilization
  - Memory Utilization

> **Note**: You can add up to 10 components at a time to an application instance. If you need more than 10 components, click **Add components** again to add more components.

4. Click **Add Selected**. The selected components are added to the application profile.
5. For each component, enter or select the following information:



□ SNMP Service Check

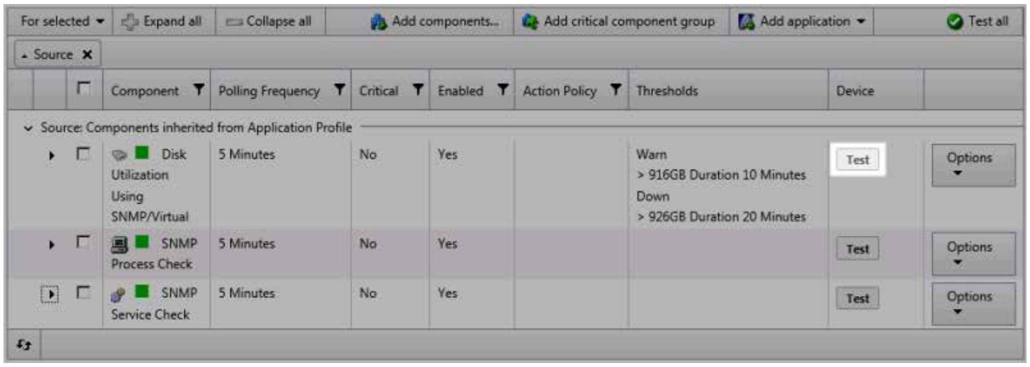
Enabled	☑
Action Policy	(No Action Policy)
Device Override	

- **Enabled**. Select this option to enable or disable the component.
- **Action Policy**. Select an action policy from the list for the component.
- **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
  - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

  - Select a device from the navigation tree on which to test the individual component and click **OK**.
  - Click **Test** to test the component on the selected device.
  - **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

- (Optional) Click **Test** to test the component.



Source: Components inherited from Application Profile

Component	Polling Frequency	Critical	Enabled	Action Policy	Thresholds	Device	
🟩 Disk Utilization Using SNMP/Virtual	5 Minutes	No	Yes		Warn > 916GB Duration 10 Minutes Down > 926GB Duration 20 Minutes	Test	Options
🟩 SNMP Process Check	5 Minutes	No	Yes			Test	Options
🟩 SNMP Service Check	5 Minutes	No	Yes			Test	Options

6 Click **Save** to save your changes or click **Save and Close** to complete your changes.

Testing components

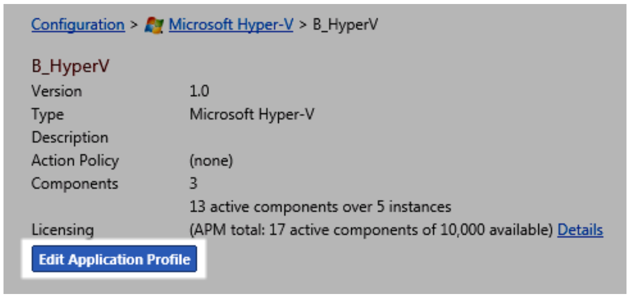
By default, components are tested on the test device specified for the associated application profile or instance. You can also specify an alternate device on which to test the component. The component initiates an immediate poll of the device, and returns a success or failure message. The values collected by the component are discarded when testing a component.

To test a single component:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select an application profile or instance from the navigation tree containing the component you want to test.

3 If you are testing a component within an application profile, click **Edit Application Profile**.

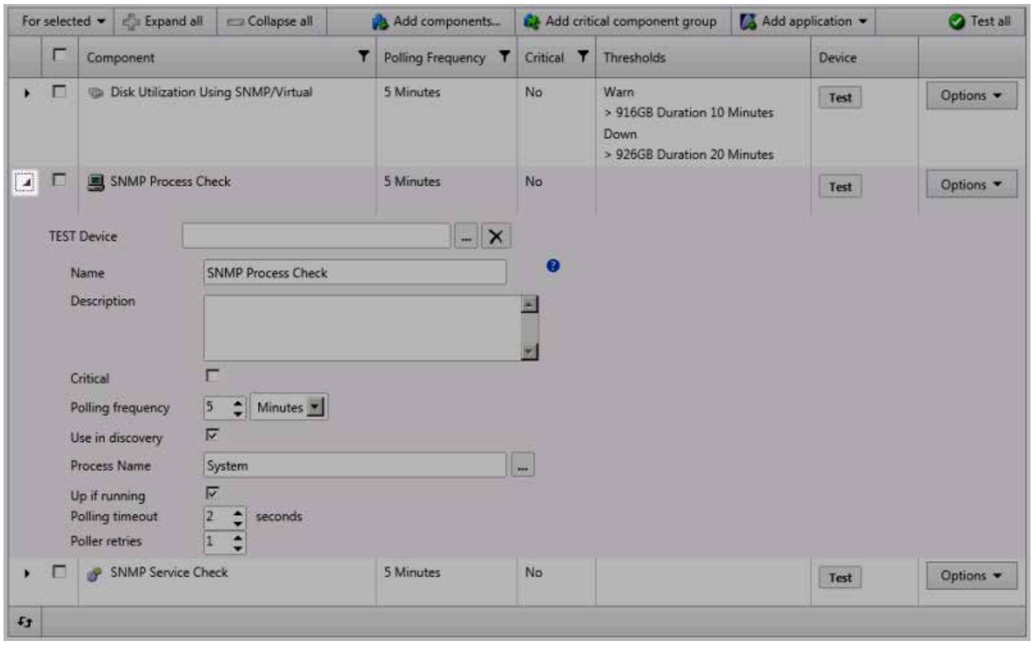


Configuration > Microsoft Hyper-V > B_HyperV

B_HyperV

Version	1.0
Type	Microsoft Hyper-V
Description	
Action Policy	(none)
Components	3
	13 active components over 5 instances
Licensing	(APM total: 17 active components of 10,000 available) Details

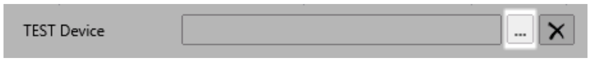
4 Click the triangle icon to the left of the component you want to test to expand the component view.



Component	Polling Frequency	Critical	Thresholds
Disk Utilization Using SNMP/Virtual	5 Minutes	No	Warn > 916GB Duration 10 Minutes Down > 926GB Duration 20 Minutes
SNMP Process Check	5 Minutes	No	
SNMP Service Check	5 Minutes	No	

TEST Device
Name: SNMP Process Check
Description
Critical □
Polling frequency: 5 Minutes
Use in discovery ☑
Process Name: System
Up if running ☑
Polling timeout: 2 seconds
Poller retries: 1

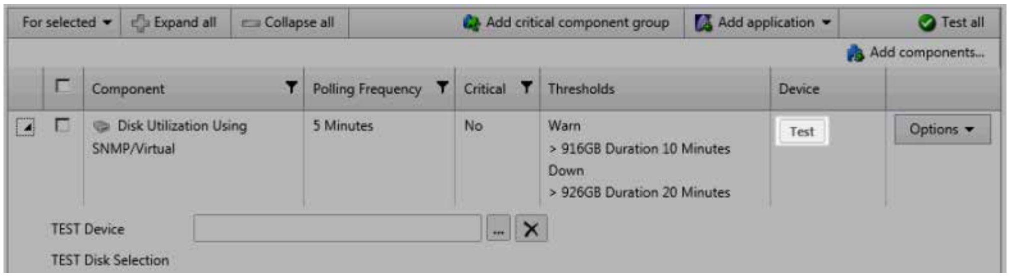
5 Click browse (**...**) next to the TEST Device box for the component to launch the Select a Device dialog.



6 Select a device from the navigation tree on which to test the individual component and click **OK**.

Note: If no test device is selected, the component is tested on the test device associated with the application profile or instance.

7 Click **Test** to test the component on the selected device. Following test completion, a message indicating test success or failure appears below the component name.



Component	Polling Frequency	Critical	Thresholds
Disk Utilization Using SNMP/Virtual	5 Minutes	No	Warn > 916GB Duration 10 Minutes Down > 926GB Duration 20 Minutes

TEST Device
TEST Disk Selection

To test multiple components simultaneously:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select an application profile or instance from the navigation tree containing the components you want to test.

3 If you are testing a component within an application profile, click **Edit Application Profile**.

4 Select which components to test by clicking the check box to the left of each applicable component name.

5 Click the triangle icon to the left of the first component you want to test to expand the component view.

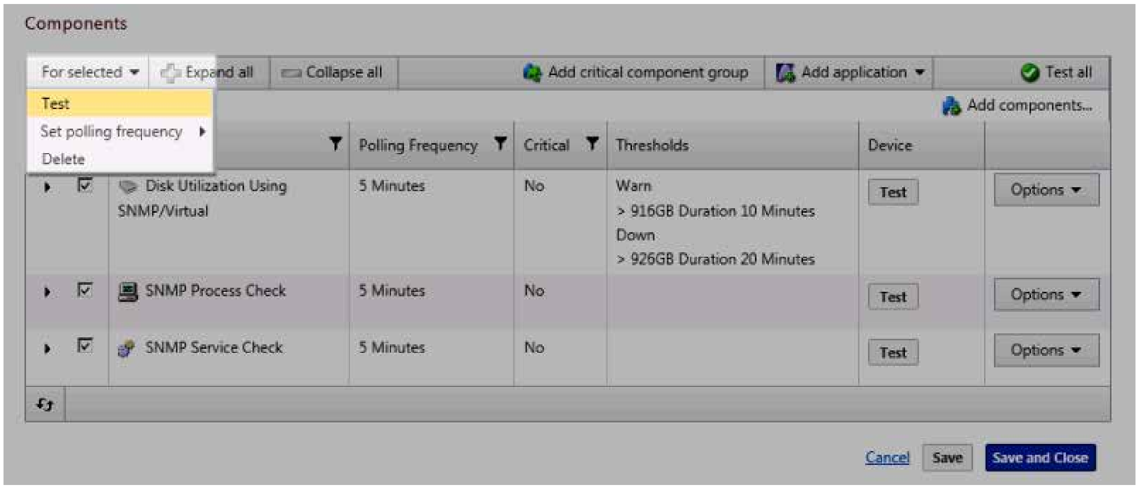
6 Click browse (**...**) next to the TEST Device box for the component to launch the Select a Device dialog.

7 Select a device from the navigation tree on which to test the individual component, then click **OK**.

8 Select TEST devices for each component you want to test in the same manner.

Note: If no test device is selected for one or more components, selected components are tested on the test device associated with the application profile or instance.

9 Expand the **For selected** menu, then click **Test**.



			Polling Frequency	Critical	Thresholds	Device	
▸	☑	Disk Utilization Using SNMP/Virtual	5 Minutes	No	Warn > 916GB Duration 10 Minutes Down > 926GB Duration 20 Minutes	Test	Options ▾
▸	☑	SNMP Process Check	5 Minutes	No		Test	Options ▾
▸	☑	SNMP Service Check	5 Minutes	No		Test	Options ▾

Following test completions, messages indicating test successes or failures appears below each selected component name.

To test all components:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select an application profile or instance from the navigation tree containing the components you want to test.

3 If you are testing a component within an application profile, click **Edit Application Profile**.

4 Click the triangle icon to the left of the first component you want to test to expand the component view.

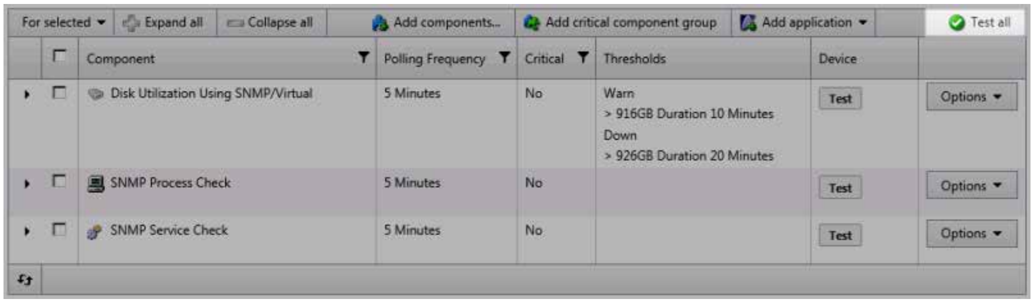
5 Click browse (**...**) next to the TEST Device box for the component to launch the Select a Device dialog.

6 Select a device from the navigation tree on which to test the individual component, then click **OK**.

7 Select TEST devices for each component in the application profile or instance in the same manner.

Note: If no test device is selected for one or more components, selected components are tested on the test device associated with the application profile or instance.

8 Click **Test all**.



	□	Component	Polling Frequency	Critical	Thresholds	Device	
▸	□	Disk Utilization Using SNMP/Virtual	5 Minutes	No	Warn > 916GB Duration 10 Minutes Down > 926GB Duration 20 Minutes	Test	Options ▾
▸	□	SNMP Process Check	5 Minutes	No		Test	Options ▾
▸	□	SNMP Service Check	5 Minutes	No		Test	Options ▾

Following test completions, messages indicating test successes or failures appears below each component name.

Adding a CPU Utilization component

The CPU Utilization component allows you to monitor the percentage of CPU being used on a particular device and alerts you if certain thresholds are exceeded. You may add a CPU Utilization component to either an application profile or an application instance.

Note: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add a CPU Utilization component to an application profile:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.

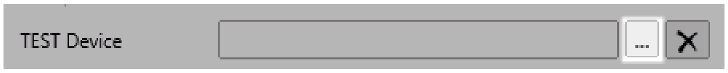
3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **CPU Utilization** to expand the dialog controls used to add the component(s).

5 Specify the number of components you want to add by clicking the up and down arrows next to the type of credential for the component being added. You can add CPU Utilization components **Using SNMP/Virtual** or **Using WMI**.

6 Click **Add Selected**.

7 Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8 Select a device from the navigation tree on which to test the individual component and click **OK**.

9 Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

> **Note**: If no test device is selected, the component is tested on the test device associated with the application profile.
>
> Test devices are not saved as part of the application profile.

10 Enter or select the appropriate information in the *CPU Utilization component boxes* (on page 35).

11 Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add a CPU Utilization component to an application instance:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application instance for which you want to add a component.

3 Click **Add components**. The Component Library appears.

4 Click the arrow next to **CPU Utilization**.

5 Specify the number of components you want to add by clicking the up and down arrows next to the type of credential for the component being added. You can add CPU Utilization components using **SNMP/Virtual** or **WMI**.

6 Click **Add selected**.

7 Enter or select the appropriate information:

- **Enabled**. Select this option to enable or disable the component.
- **Action Policy**. Select an action policy from the list for the component.
- **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
  - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> ✓ **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

  - Select a device from the navigation tree on which to test the individual component and click **OK**.
  - Click **Test** to test the component on the selected device.

> **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

8 Enter or select the appropriate information in the *CPU Utilization component boxes* (on page 35).

9 Click **Save** to save your changes or click **Save and Close** to complete your changes.

CPU Utilization component fields

You may configure the following boxes for the CPU Utilization component:

§ **Name**. Enter a unique name for the component.

§ **Description**. (Optional) Enter additional information about the component.

§ **Critical**. Click to select this check box if the component is critical.

Note: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

§ **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.

§ **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.

§ **Poller retries**. Enter the number of times APM attempts to send the command before the device is considered down.

§ **Warning threshold**. Enter the component thresholds for the warning state. For example, if the component value is greater than 90 percent for 5 minutes, put the component in the warning state.

§ **Down threshold**. Enter the component thresholds for the down state. For example, if the component value is greater than 95 percent for 5 minutes, put the component in the down state.

Adding a MySQL Query component

The MySQL Query component allows you to create a query to run on a specific device to assess the health of a MySQL database. You can add a MySQL Query component to either an application profile or and application instance.

Note: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add a MySQL Query component to an application profile:

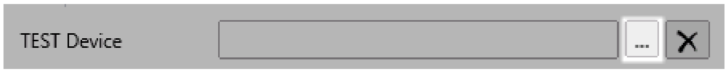
1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.

3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **Database Query** to expand the dialog controls used to add the component(s).

5. Specify the number of components you want to add by clicking the up and down arrows next to **MySQL**.
6. Click **Add Selected**.
7. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8. Select a device from the navigation tree on which to test the individual component and click **OK**.
9. Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

> **Note**: If no test device is selected, the component is tested on the test device associated with the application profile.
>
> Test devices are not saved as part of the application profile.

10. Enter or select the appropriate information in the *MySQL Query component boxes* (on page 37).
11. Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add a MySQL Query component to an application instance:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application instance for which you want to add a component.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Database Query**, then specify the number of components you want to add by clicking the up and down arrows next to **MySQL**.
5. Click **Add Selected**.
6. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component.
   - **Action Policy**. Select an action policy from the list for the component.
   - **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
     - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

     - Select a device from the navigation tree on which to test the individual component and click **OK**.
     - Click **Test** to test the component on the selected device.

Note: Click ✕ to remove the device override and revert to the device associated with the application instance.

7 Enter or select the appropriate information in the *MySQL Query component boxes* (on page 37).

8 Click **Save** to save your changes or click **Save and Close** to complete your changes.

MySQL Query component fields

You may configure the following boxes for the MySQL Query component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

Note: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Server Address**. Enter in `ServerName` format (for example, WUGServer).

Important: To use the SQL Query monitor to monitor a MySQL database, you must first download and install the MySQL .NET Connector on the WhatsUp Gold machine. Note that only MySQL version 5.2.5 .NET Connector is supported due to compatibility issues. The connector is located on the WhatsUp Gold website (*http://www.whatsupgold.com/MySQL525Connector* (http://www.whatsupgold.com/MySQL525connector)). This link downloads the `mysql-connector-net-5.2.5.zip` file. After the file downloads, extract the `MySQL.Data.msi` and run the MySQL Connector setup utility by double-clicking on the **MySQL.Data.msi** icon. On the Choose Setup Type dialog, select **Typical**, then click **Install**. The MySQL .NET Connector is installed in the following location: `C:\Program Files\MySQL\MySQL Connector Net 5.2.5\`. After the .NET Connector has been installed, restart the WhatsUp Gold machine.

- **Port Number**. Enter the database server port number if other than the standard database port number.
- **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.
- **Query to Run**. Enter a query you want to run against a database to monitor and check for certain database conditions. Only SQL SELECT queries are allowed.

Important: Make sure that you include the full database name in your query.

- **Warning threshold**. Enter the component thresholds for the warning state. For example, if the component value is greater than 90 for 5 minutes, put the component in the warning state.
- **Down threshold**. Enter the component thresholds for the down state. For example, if the component value is greater than 95 for 5 minutes, put the component in the down state.

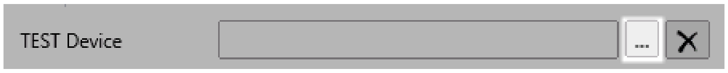
Adding an Oracle Query component

The Oracle Query component allows you to create a query to run on a specific device to assess the health of an Oracle database. You may add an Oracle Query component to either an application profile or an application instance.

Note: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add an Oracle Query component to an application profile:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Database Query** to expand the dialog controls used to add the component(s).
5. Specify the number of components you want to add by clicking the up and down arrows next to **Oracle**.
6. Click **Add Selected**.
7. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8. Select a device from the navigation tree on which to test the individual component and click **OK**.
9. Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

Note: If no test device is selected, the component is tested on the test device associated with the application profile.

Test devices are not saved as part of the application profile.

10. Enter or select the appropriate information in the *Oracle Query component fields* (on page 39).
11. Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add an Oracle Query component to an application instance:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application instance for which you want to add a component.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Database Query**, then specify the number of components you want to add by clicking the up and down arrows next to **Oracle**.
5. Click **Add Selected**.
6. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component.
   - **Action Policy**. Select an action policy from the list for the component.
   - **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
     - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

     - Select a device from the navigation tree on which to test the individual component and click **OK**.
     - Click **Test** to test the component on the selected device.

> **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

7. Enter or select the appropriate information in the *Oracle Query component boxes* (on page 39).
8. Click **Save** to save your changes or click **Save and Close** to complete your changes.

Oracle Query component fields

You may configure the following boxes for the Oracle Query component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

> **Note**: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Service name**. Enter the `ServiceName`.
- **Port (optional)**. Enter the database server port number if other than the standard database port number.
- **Connection timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.
- **Query to Run**. Enter a query you want to run against a database to monitor and check for certain database conditions. Only select queries are allowed.

Important: Make sure that you include the full database name in your query.

- **Warning threshold**. Enter the component thresholds for the warning state. For example, if the component value is greater than 90 for 5 minutes, put the component in the warning state.
- **Down threshold**. Enter the component thresholds for the down state. For example, if the component value is greater than 95 for 5 minutes, put the component in the down state.

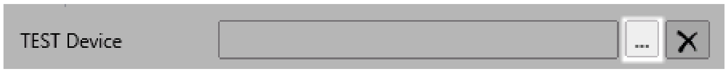
Adding a SQL Server Query component

The SQL Server component provides you with real-time information about the state and health of a Microsoft® SQL Server 2000 application on a specific device. You may add a SQL Server Query component to either an application profile or an application instance.

Note: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add a SQL Server Query component to an application profile:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Database Query** to expand the dialog controls used to add the component(s).
5. Specify the number of components you want to add by clicking the up and down arrows next to **SQL Server**.
6. Click **Add Selected**.
7. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8 Select a device from the navigation tree on which to test the individual component and click **OK**.

9 Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

> **Note**: If no test device is selected, the component is tested on the test device associated with the application profile.
>
> Test devices are not saved as part of the application profile.

10 Enter or select the appropriate information in the *SQL Server Query component boxes* (on page 42).

11 Enter or select the appropriate information:

12 Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add a SQL Server Query component to an application instance:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application instance for which you want to add a component.

3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **Database Query**, then specify the number of components you want to add by clicking the up and down arrows next to **SQL Server**.

5 Click **Add Selected**.

6 Enter or select the appropriate information:

    § **Enabled**. Select this option to enable or disable the component.

    § **Action Policy**. Select an action policy from the list for the component.

§ **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.

    § Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

    § Select a device from the navigation tree on which to test the individual component and click **OK**.

    § Click **Test** to test the component on the selected device.

> **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

7 Enter or select the appropriate information in the *SQL Server Query component boxes* (on page 42).

8 Click **Save** to save your changes or click **Save and Close** to complete your changes.

SQL Server component fields

You may configure the following boxes for the SQL Server component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

> **Note**: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Server Address**. Enter in `ServerName\Instance` format (for example, WUGServer\SQLEXPRESS).
- **Port Number**. Enter the database server port number if other than the standard database port number.
- **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.
- **Query to Run**. Enter a query you want to run against a database to monitor and check for certain database conditions. Only SQL SELECT queries are allowed.

> **Important**: Make sure that you include the full database name in your query.

- **Warning threshold**. Enter the component thresholds for the warning state. For example, if the component value is greater than 90 for 5 minutes, put the component in the warning state.
- **Down threshold**. Enter the component thresholds for the down state. For example, if the component value is greater than 95 for 5 minutes, put the component in the down state.

Adding a Disk Utilization component

The Disk Utilization component allows you to monitor the percentage of disk space being utilized on a specific device. You may add a Disk Utilization component to an application profile or an application instance.

> **Note**: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add a Disk Utilization component to an application profile:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.

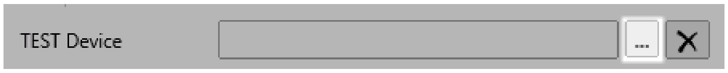
3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **Disk Utilization** to expand the dialog controls used to add the component(s).

5 Specify the number of components you want to add by clicking the up and down arrows next to the type of credential for the component being added. You can add Disk Utilization components **Using SNMP/Virtual** or **Using WMI**.

6 Click **Add Selected**.

7 Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8 Select a device from the navigation tree on which to test the individual component and click **OK**.

9 Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

Note: If no test device is selected, the component is tested on the test device associated with the application profile.

Test devices are not saved as part of the application profile.

10 Enter or select the appropriate information in the *Disk Utilization Query component boxes* (on page 44).

11 Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add a Disk Utilization component to an application instance:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application instance for which you want to add a component.

3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **Disk Utilization**.

5 Specify the number of components you want to add by clicking the up and down arrows next to the type of credential for the component being added. You can add Disk Utilization components using **SNMP/Virtual** or **WMI**.

6 Click **Add Selected**.

7 Enter or select the appropriate information:

§ **Enabled**. Select this option to enable or disable the component.

§ **Action Policy**. Select an action policy from the list for the component.

§ **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.

    - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

    - Select a device from the navigation tree on which to test the individual component and click **OK**.
    - Click **Test** to test the component on the selected device.

> **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

  - **Disk Selection**. Select the disk drive for which you want to monitor.

8. Enter or select the appropriate information in the *Disk Utilization Query component boxes* (on page 44).
9. Click **Save** to save your changes or click **Save and Close** to complete your changes.

Disk Utilization component fields

You may configure the following boxes for the Disk Utilization component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

> **Note**: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.
- **Poller retries**. Enter the number of times APM attempts to send the command before the device is considered down.
- **Warning threshold**. Enter the component thresholds for the warning state. For example, if the component value is greater than 90 percent for 5 minutes, put the component in the warning state.
- **Down threshold**. Enter the component thresholds for the down state. For example, if the component value is greater than 95 percent for 5 minutes, put the component in the down state.

Adding a Physical Memory Utilization component to an application profile

The Physical Memory Utilization component allows you to monitor the percentage or absolute amount of physical memory being utilized on a specific device.

Note: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add a Physical Memory Utilization component to an application profile:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.

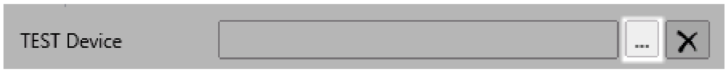
3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **Memory Utilization** to expand the dialog controls used to add the component(s).

5 Specify the number of components you want to add by clicking the up and down arrows next to the credential and memory type for the component being added. You can add physical memory components using **Physical Memory Using SNMP/Virtual** or **Physical Memory Using WMI**.

6 Click **Add Selected**.

7 Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8 Select a device from the navigation tree on which to test the individual component and click **OK**.

9 Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

Note: If no test device is selected, the component is tested on the test device associated with the application profile.

Test devices are not saved as part of the application profile.

10 Enter or select the appropriate information in the *Physical Memory Utilization component boxes* (on page 46).

11 Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add a Physical Memory Utilization component to an application instance:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application instance for which you want to add a component.

3 Click **Add Components**. The Component Library appears.

4. Click the arrow next to **Memory Utilization**.
5. Specify the number of components you want to add by clicking the up and down arrows next to the credential and memory type for the component being added. You can add physical memory components using **Physical Memory Using SNMP/Virtual** or **Physical Memory Using WMI**.
6. Click **Add Selected**.
7. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component.
   - **Action Policy**. Select an action policy from the list for the component.
   - **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
     - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

   - Select a device from the navigation tree on which to test the individual component and click **OK**.
   - Click **Test** to test the component on the selected device.

> **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

8. Enter or select the appropriate information in the *Physical Memory Utilization component boxes* (on page 46).
9. Click **Save** to save your changes or click **Save and Close** to complete your changes.

Physical Memory component fields

You may configure the following boxes for the Physical Memory component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

> **Note**: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.

§ **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.

§ **Poller retries**. Enter the number of times APM attempts to send the command before the device is considered down.

§ **Warning threshold**. Enter the component thresholds for the warning state. For example, if the component value is greater than 90 percent for 5 minutes, put the component in the warning state.

§ **Down threshold**. Enter the component thresholds for the down state. For example, if the component value is greater than 95 percent for 5 minutes, put the component in the down state.

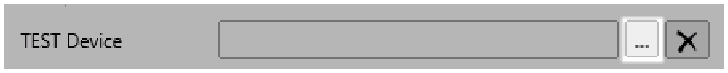
Adding a Virtual Memory Utilization component

The Virtual Memory Utilization component allows you to monitor the percentage or absolute amount of virtual memory being utilized on a specific device.

Note: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add a Virtual Memory Utilization component to an application profile:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Memory Utilization** to expand the dialog controls used to add the component(s).
5. Specify the number of components you want to add by clicking the up and down arrows next to the credential and memory type for the component being added. You can add virtual memory components using **Virtual Memory Using SNMP/Virtual** or **Virtual Memory Using WMI**.
6. Click **Add Selected**.
7. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8. Select a device from the navigation tree on which to test the individual component and click **OK**.
9. Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

Note: If no test device is selected, the component is tested on the test device associated with the application profile.

Test devices are not saved as part of the application profile.

10 Enter or select the appropriate information in the *Virtual Memory Utilization component boxes* (on page 48).

11 Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add a Virtual Memory Utilization component to an application instance:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application instance for which you want to add a component.

3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **Memory Utilization**.

5 Specify the number of components you want to add by clicking the up and down arrows next to the credential and memory type for the component being added. You can add virtual memory components using **Virtual Memory Using SNMP/Virtual** or **Virtual Memory Using WMI**.

6 Click **Add Selected**.

7 Enter or select the appropriate information:

§ **Enabled**. Select this option to enable or disable the component.

§ **Action Policy**. Select an action policy from the list for the component.

§ **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.

§ Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

Important: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

§ Select a device from the navigation tree on which to test the individual component and click **OK**.

§ Click **Test** to test the component on the selected device.

Note: Click ✕ to remove the device override and revert to the device associated with the application instance.

8 Enter or select the appropriate information in the *Virtual Memory Utilization component boxes* (on page 48).

9 Click **Save** to save your changes or click **Save and Close** to complete your changes.

Virtual Memory component fields

You may configure the following boxes for the Virtual Memory component:

§ **Name**. Enter a unique name for the component.

- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

> **Note**: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.
- **Poller retries**. Enter the number of times APM attempts to send the command before the device is considered down.
- **Warning threshold**. Enter the component thresholds for the warning state. For example, if the component value is greater than 90 percent for 5 minutes, put the component in the warning state.
- **Down threshold**. Enter the component thresholds for the down state. For example, if the component value is greater than 95 percent for 5 minutes, put the component in the down state.

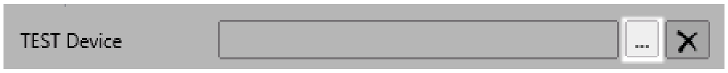
Adding a Custom Port Check component

The Custom Port Check component allows you to create a script to run on a specific device that monitors a designated TCP, UDP, or SSL network port.

> **Note**: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add a Custom Port Check component to an application profile:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Network Port Check** to expand the dialog controls used to add the component(s).
5. Specify the number of components you want to add by clicking the up and down arrows next to **Custom**.
6. Click **Add Selected**.
7. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8. Select a device from the navigation tree on which to test the individual component and click **OK**.
9. Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

> **Note**: If no test device is selected, the component is tested on the test device associated with the application profile.
>
> Test devices are not saved as part of the application profile.

10. Enter or select the appropriate information:
11. Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add a Custom Port Check component to an application instance:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application instance for which you want to add a component.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Network Port Check**, then specify the number of components you want to add by clicking the up and down arrows next to **Custom**.
5. Click **Add Selected**.
6. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component.
   - **Action Policy**. Select an action policy from the list for the component.
   - **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
     - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

     - Select a device from the navigation tree on which to test the individual component and click **OK**.
     - Click **Test** to test the component on the selected device.
   - **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.
7. Enter or select the appropriate information in the *Custom Port Check component boxes* (on page 51).
8. Click **Save** to save your changes or click **Save and Close** to complete your changes.

Custom Port Check component fields

You may configure the following boxes for the Custom Port Check component:

§ **Name**. Enter a unique name for the component.

§ **Description**. (Optional) Enter additional information about the component.

§ **Critical**. Click to select this check box if the component is critical.

> **Note**: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

§ **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.

§ **Protocol**. Select TCP, UDP, or SSL from the list. The network type for the FTP (File Transfer Protocol) service is TCP; the network type for the RADIUS (Remote Authentication and Dial-In User Service) service is UDP. The HTTPS monitor uses the SSL type.

§ **Port number**. Enter the port number that you want to monitor.

§ **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.

§ **Script to Run**. Write your script using as many `Send`, `Expect`, `SimpleExpect`, and `Flow Control` keywords as you want. For more information, see Script Syntax.

§ **Expect**. (Optional) Click to open the *Rules Expression Editor* (on page **Error! Bookmark not defined.**) and test a string of text for particular patterns.

Adding an Echo Port Check component

The Echo Port Check component allows you to create a script to run on a specific device that monitors a designated TCP, UDP, SSL network port using the Echo protocol. You may add an Echo Port Check component to an application profile or an application instance.

> **Note**: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add an Echo Port Check component to an application profile:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.

3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **Network Port Check**, then specify the number of components you want to add by clicking the up and down arrows next to **Echo**.

5. Click **Add Selected**.
6. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.

7. Select a device from the navigation tree on which to test the individual component and click **OK**.
8. Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

> **Note**: If no test device is selected, the component is tested on the test device associated with the application profile.
>
> Test devices are not saved as part of the application profile.

9. Enter or select the appropriate information in the *Echo Port Check component boxes* (on page 53).
10. Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add an Echo Port Check component to an application instance:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application instance for which you want to add a component.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Network Port Check**, then specify the number of components you want to add by clicking the up and down arrows next to **Echo**.
5. Click **Add Selected**.
6. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component.
   - **Action Policy**. Select an action policy from the list for the component.
   - **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
     - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

     - Select a device from the navigation tree on which to test the individual component and click **OK**.
     - Click **Test** to test the component on the selected device.
   - **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

7 Enter or select the appropriate information in the *Echo Port Check component boxes* (on page 53).

8 Click **Save** to save your changes or click **Save and Close** to complete your changes.

Echo Port Check component fields

You may configure the following boxes for the Echo Port Check component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

> **Note**: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Protocol**. Select TCP, UDP, or SSL from the list. The network type for the FTP (File Transfer Protocol) service is TCP; the network type for the RADIUS (Remote Authentication and Dial-In User Service) service is UDP. The HTTPS monitor uses the SSL type.
- **Port number**. Enter the port number that you want to monitor.
- **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.
- **Script to Run**. Enter your script using as many `Send`, `Expect`, `SimpleExpect`, and `Flow Control` keywords as you want. For more information, see Script Syntax.
- **Expect**. (Optional) Click to open the *Rules Expression Editor* (on page **Error! Bookmark not defined.**) and test a string of text for particular patterns.

Adding an FTP Port Check component

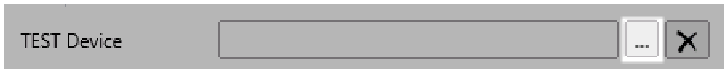
The FTP Port Check component allows you to create a script to run on a specific device that monitors a designated TCP, UDP, SSL network port using the File Transfer Protocol (FTP). You may add an FTP Port Check component to an application profile or an application instance.

> **Note**: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add an FTP port Check component to an application profile:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2. Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Network Port Check** to expand the dialog controls used to add the component(s).
5. Specify the number of components you want to add by clicking the up and down arrows next to **FTP**.
6. Click **Add Selected**.
7. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8. Select a device from the navigation tree on which to test the individual component and click **OK**.
9. Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

Note: If no test device is selected, the component is tested on the test device associated with the application profile.

Test devices are not saved as part of the application profile.

10. Enter or select the appropriate information in the *FTP Port Check component boxes* (on page 55).
11. Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add an Echo Port Check component to an application instance:

1.
2. Click **Add Components**. The Component Library appears.
3. Click the arrow next to **Network Port Check**, then specify the number of components you want to add by clicking the up and down arrows next to **FTP**.
4. Click **Add Selected**.
5. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component.
   - **Action Policy**. Select an action policy from the list for the component.
   - **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
     - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

Important: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

  - Select a device from the navigation tree on which to test the individual component and click **OK**.
  - Click **Test** to test the component on the selected device.
- **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

6 Enter or select the appropriate information in the *FTP Port Check component boxes* (on page 55).

7 Click **Save** to save your changes or click **Save and Close** to complete your changes.

FTP Port Check component fields

You may configure the following boxes for the FTP Port Check component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

Note: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Protocol**. Select TCP, UDP, or SSL from the list. The network type for the FTP (File Transfer Protocol) service is TCP; the network type for the RADIUS (Remote Authentication and Dial-In User Service) service is UDP. The HTTPS monitor uses the SSL type.
- **Port number**. Enter the port number that you want to monitor.
- **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.
- **Script to Run**. Enter your script using as many `Send`, `Expect`, `SimpleExpect`, and `Flow Control` keywords as you want. For more information, see Script Syntax.
- **Expect**. (Optional) Click to open the *Rules Expression Editor* (on page **Error! Bookmark not defined.**) and test a string of text for particular patterns.

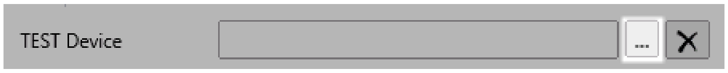
Adding an HTTP Port Check component

The HTTP Port Check component allows you to create a script to run on a specific device that monitors a designated TCP, UDP, SSL network port using the Hypertext Transfer Protocol (HTTP). You may add an HTTP Port Check component to an application profile or an application instance.

Note: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add an HTTP Port Check component to an application profile:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Network Port Check** to expand the dialog controls used to add the component(s).
5. Specify the number of components you want to add by clicking the up and down arrows next to **HTTP**.
6. Click **Add Selected**.
7. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8. Select a device from the navigation tree on which to test the individual component and click **OK**.
9. Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

Note: If no test device is selected, the component is tested on the test device associated with the application profile.

Test devices are not saved as part of the application profile.

10. Enter or select the appropriate information in the *HTTP Port Check component boxes* (on page 57).
11. Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add an HTTP Port Check component to an application instance:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application instance for which you want to add a component.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Network Port Check**, then specify the number of components you want to add by clicking the up and down arrows next to **HTTP**.
5. Click **Add Selected**.
6. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component.
   - **Action Policy**. Select an action policy from the list for the component.

- **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
  - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

Important: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

  - Select a device from the navigation tree on which to test the individual component and click **OK**.
  - Click **Test** to test the component on the selected device.
- **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

7 Enter or select the appropriate information in the *HTTP Port Check component boxes* (on page 57).

8 Click **Save** to save your changes or click **Save and Close** to complete your changes.

HTTP Port Check component fields

You may configure the following boxes for the HTTP Port Check component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

Note: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Protocol**. Select TCP, UDP, or SSL from the list. The network type for the FTP (File Transfer Protocol) service is TCP; the network type for the RADIUS (Remote Authentication and Dial-In User Service) service is UDP. The HTTPS monitor uses the SSL type.
- **Port number**. Enter the port number that you want to monitor.
- **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.
- **Script to Run**. Enter your script using as many `Send`, `Expect`, `SimpleExpect`, and `Flow Control` keywords as you want. For more information, see Script Syntax.
- **Expect**. (Optional) Click to open the *Rules Expression Editor* (on page **Error! Bookmark not defined.**) and test a string of text for particular patterns.

Adding an HTTPS Port Check component

The HTTPS Port Check component allows you to create a script to run on a specific device that monitors a designated TCP, UDP, SSL network port using Hypertext Transfer Protocol Secure (HTTPS). You may add an HTTPS Port Check component to an application profile or an application instance.

> **Note**: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add an HTTPS Port Check component to an application profile:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.

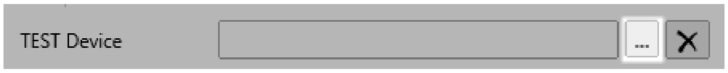
3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **Network Port Check** to expand the dialog controls used to add the component(s).

5 Specify the number of components you want to add by clicking the up and down arrows next to **HTTPS**.

6 Click **Add Selected**.

7 Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8 Select a device from the navigation tree on which to test the individual component and click **OK**.

9 Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

> **Note**: If no test device is selected, the component is tested on the test device associated with the application profile.
>
> Test devices are not saved as part of the application profile.

10 Enter or select the appropriate information in the *HTTPS Port Check component boxes* (on page 59).

11 Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add an HTTPS Port Check component to an application instance:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application instance for which you want to add a component.

3 Click **Add Components**. The Component Library appears.

4. Click the arrow next to **Network Port Check**, then specify the number of components you want to add by clicking the up and down arrows next to **HTTPS**.
5. Click **Add Selected**.
6. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component.
   - **Action Policy**. Select an action policy from the list for the component.
   - **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
     - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

- Select a device from the navigation tree on which to test the individual component and click **OK**.
- Click **Test** to test the component on the selected device.

> **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

7. Enter or select the appropriate information in the *HTTPS Port Check component boxes* (on page 59).
8. Click **Save** to save your changes or click **Save and Close** to complete your changes.

HTTPS Port Check component fields

You may configure the following boxes for the HTTPS Port Check component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

> **Note**: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Protocol**. Select TCP, UDP, or SSL from the list. The network type for the FTP (File Transfer Protocol) service is TCP; the network type for the RADIUS (Remote Authentication and Dial-In User Service) service is UDP. The HTTPS monitor uses the SSL type.

§ **Port number**. Enter the port number that you want to monitor.

§ **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.

§ **Script to Run**. Enter your script using as many `Send`, `Expect`, `SimpleExpect`, and `Flow Control` keywords as you want. For more information, see Script Syntax.

§ **Expect**. (Optional) Click to open the *Rules Expression Editor* (on page **Error! Bookmark not defined.**) and test a string of text for particular patterns.

Adding an IMAP4 Port Check component

The IMAP4 Port Check component allows you to create a script to run on a specific device that monitors a designated TCP, UDP, SSL network port using the Internet Message Access Protocol (IMAP4). You may add an IMAP4 Port Check component to an application profile or an application instance.

> **Note**: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add an IMAP4 Port Check component to an application profile:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.

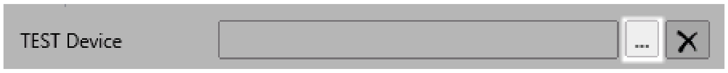
3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **Network Port Check**, to expand the dialog controls used to add the component(s).

5 Specify the number of components you want to add by clicking the up and down arrows next to **IMAP4**.

6 Click **Add Selected**.

7 Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8 Select a device from the navigation tree on which to test the individual component and click **OK**.

9 Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

> **Note**: If no test device is selected, the component is tested on the test device associated with the application profile.
>
> Test devices are not saved as part of the application profile.

10. Enter or select the appropriate information in the *IMAP4 Port Check component boxes* (on page 60).
11. Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add an IMAP4 Port Check component to an application instance:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application instance for which you want to add a component.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Network Port Check**, then specify the number of components you want to add by clicking the up and down arrows next to **IMAP4**.
5. Click **Add Selected**.
6. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component.
   - **Action Policy**. Select an action policy from the list for the component.
   - **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
     - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

     - Select a device from the navigation tree on which to test the individual component and click **OK**.
     - Click **Test** to test the component on the selected device.

> **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

7. Enter or select the appropriate information in the *IMAP4 Port Check component boxes* (on page 60).
8. Click **Save** to save your changes or click **Save and Close** to complete your changes.

IMAP4 Port Check component fields

You may configure the following boxes for the IMAP4 Port Check component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

Note: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

§ **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.

§ **Protocol**. Select TCP, UDP, or SSL from the list. The network type for the FTP (File Transfer Protocol) service is TCP; the network type for the RADIUS (Remote Authentication and Dial-In User Service) service is UDP. The HTTPS monitor uses the SSL type.

§ **Port number**. Enter the port number that you want to monitor.

§ **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.

§ **Script to Run**. Enter your script using as many `Send`, `Expect`, `SimpleExpect`, and `Flow Control` keywords as you want. For more information, see Script Syntax.

§ **Expect**. (Optional) Click to open the *Rules Expression Editor* (on page **Error! Bookmark not defined.**) and test a string of text for particular patterns.

Adding an NNTP Port Check component

The NNTP Port Check component allows you to create a script to run on a specific device that monitors a designated TCP, UDP, SSL network port using the Network News Transfer Protocol (NNTP). You may add an NNTP Port Check component to an application profile or an application instance.

Note: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add an NNTP Port Check component to an application profile:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.

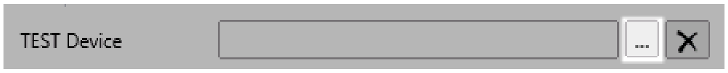
3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **Network Port Check** to expand the dialog controls used to add the component(s).

5 Specify the number of components you want to add by clicking the up and down arrows next to **NNTP**.

6 Click **Add Selected**.

7. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8. Select a device from the navigation tree on which to test the individual component and click **OK**.
9. Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

> **Note**: If no test device is selected, the component is tested on the test device associated with the application profile.
>
> Test devices are not saved as part of the application profile.

10. Enter or select the appropriate information in the *NNTP Port Check component fields* (on page 64).
11. Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add an NNTP Port Check component to an application instance:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application instance for which you want to add a component.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Network Port Check**, then specify the number of components you want to add by clicking the up and down arrows next to **NNTP**.
5. Click **Add Selected**.
6. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component.
   - **Action Policy**. Select an action policy from the list for the component.
   - **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
     - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

- Select a device from the navigation tree on which to test the individual component and click **OK**.
- Click **Test** to test the component on the selected device.

> **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

7 Enter or select the appropriate information in the *NNTP Port Check component boxes* (on page 64).

8 Click **Save** to save your changes or click **Save and Close** to complete your changes.

NNTP Port Check component fields

You may configure the following boxes for the NNTP Port Check component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

> **Note**: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Protocol**. Select TCP, UDP, or SSL from the list. The network type for the FTP (File Transfer Protocol) service is TCP; the network type for the RADIUS (Remote Authentication and Dial-In User Service) service is UDP. The HTTPS monitor uses the SSL type.
- **Port number**. Enter the port number that you want to monitor.
- **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.
- **Script to Run**. Enter your script using as many `Send`, `Expect`, `SimpleExpect`, and `Flow Control` keywords as you want. For more information, see Script Syntax.
- **Expect**. (Optional) Click to open the *Rules Expression Editor* (on page **Error! Bookmark not defined.**) and test a string of text for particular patterns.

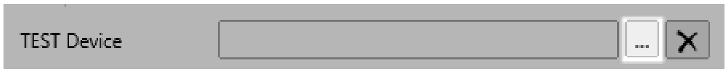
Adding a POP3 Port Check component

The POP3 Port Check component allows you to create a script to run on a specific device that monitors a designated TCP, UDP, SSL network port using the Post Office Protocol (POP3). You may add a POP3 Port Check component to an application profile or an application instance.

> **Note**: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add a POP3 Port Check component to an application profile:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Network Port Check** to expand the dialog controls used to add the component(s).
5. Specify the number of components you want to add by clicking the up and down arrows next to **POP3**.
6. Click **Add Selected**.
7. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8. Select a device from the navigation tree on which to test the individual component and click **OK**.
9. Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

> **Note**: If no test device is selected, the component is tested on the test device associated with the application profile.
>
> Test devices are not saved as part of the application profile.

10. Enter or select the appropriate information in the *POP3 Port Check component boxes* (on page 66).
11. Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add a POP3 Port Check component to an application instance:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application instance for which you want to add a component.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Network Port Check**, then specify the number of components you want to add by clicking the up and down arrows next to **POP3**.
5. Click **Add Selected**.
6. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component.
   - **Action Policy**. Select an action policy from the list for the component.
   - **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
     - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

Important: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

§ Select a device from the navigation tree on which to test the individual component and click **OK**.

§ Click **Test** to test the component on the selected device.

Note: Click ✕ to remove the device override and revert to the device associated with the application instance.

7 Enter or select the appropriate information in the *POP3 Port Check component boxes* (on page 66).

8 Click **Save** to save your changes or click **Save and Close** to complete your changes.

POP3 Port Check component fields

You may configure the following boxes for the POP3 Port Check component:

§ **Name**. Enter a unique name for the component.

§ **Description**. (Optional) Enter additional information about the component.

§ **Critical**. Click to select this check box if the component is critical.

Note: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

§ **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.

§ **Protocol**. Select TCP, UDP, or SSL from the list. The network type for the FTP (File Transfer Protocol) service is TCP; the network type for the RADIUS (Remote Authentication and Dial-In User Service) service is UDP. The HTTPS monitor uses the SSL type.

§ **Port number**. Enter the port number that you want to monitor.

§ **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.

§ **Script to Run**. Enter your script using as many `Send`, `Expect`, `SimpleExpect`, and `Flow Control` keywords as you want. For more information, see Script Syntax.

§ **Expect**. (Optional) Click to open the *Rules Expression Editor* (on page **Error! Bookmark not defined.**) and test a string of text for particular patterns.

Adding a Radius Port Check component to an application profile

The Radius Port Check component allows you to create a script to run on a specific device that monitors a designated TCP, UDP, SSL network port using the Radius protocol. You may add a Radius Port Check component to an application profile or an application instance.

> **Note**: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add a Radius Port Check component to an application profile:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.

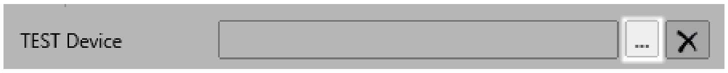
3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **Network Port Check** to expand the dialog controls used to add the component(s).

5 Specify the number of components you want to add by clicking the up and down arrows next to **Radius**.

6 Click **Add Selected**.

7 Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8 Select a device from the navigation tree on which to test the individual component and click **OK**.

9 Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

> **Note**: If no test device is selected, the component is tested on the test device associated with the application profile.
>
> Test devices are not saved as part of the application profile.

10 Enter or select the appropriate information in the *Radius Port Check component boxes* (on page 68).

11 Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add a Radius Port Check component to an application instance:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application instance for which you want to add a component.

3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **Network Port Check**, then specify the number of components you want to add by clicking the up and down arrows next to **Radius**.

5 Click **Add Selected**.

6 Enter or select the appropriate information:

- **Enabled**. Select this option to enable or disable the component.
- **Action Policy**. Select an action policy from the list for the component.
- **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
  - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

  - Select a device from the navigation tree on which to test the individual component and click **OK**.
  - Click **Test** to test the component on the selected device.

> **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

7 Enter or select the appropriate information in the *Radius Port Check component boxes* (on page 68).

8 Click **Save** to save your changes or click **Save and Close** to complete your changes.

Radius Port Check component fields

You may configure the following boxes for the Radius Port Check component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

> **Note**: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Protocol**. Select TCP, UDP, or SSL from the list. The network type for the FTP (File Transfer Protocol) service is TCP; the network type for the RADIUS (Remote Authentication and Dial-In User Service) service is UDP. The HTTPS monitor uses the SSL type.
- **Port number**. Enter the port number that you want to monitor.

- **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.
- **Script to Run**. Enter your script using as many `Send`, `Expect`, `SimpleExpect`, and `Flow Control` keywords as you want. For more information, see Script Syntax.
- **Expect**. (Optional) Click to open the *Rules Expression Editor* (on page **Error! Bookmark not defined.**) and test a string of text for particular patterns.

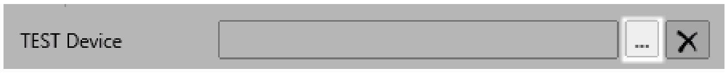
Adding an SMTP Port Check component

The SMTP Port Check component allows you to create a script to run on a specific device that monitors a designated TCP, UDP, SSL network port using the Simple Mail Transfer Protocol (SMTP). You may add an SMTP Port Check component to an application profile or an application instance.

Note: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add an SMTP Port Check component to an application profile:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Network Port Check** to expand the dialog controls used to add the component(s).
5. Specify the number of components you want to add by clicking the up and down arrows next to **SMTP**.
6. Click **Add Selected**.
7. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8. Select a device from the navigation tree on which to test the individual component and click **OK**.
9. Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

Note: If no test device is selected, the component is tested on the test device associated with the application profile.

Test devices are not saved as part of the application profile.

10. Enter or select the appropriate information in the *SMTP Port Check component fields* (on page 70).

11 Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add an SMTP Port Check component to an application instance:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application instance for which you want to add a component.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Network Port Check**, then specify the number of components you want to add by clicking the up and down arrows next to **SMTP**.
5. Click **Add Selected**.
6. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component.
   - **Action Policy**. Select an action policy from the list for the component.
   - **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
     - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

Important: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

- Select a device from the navigation tree on which to test the individual component and click **OK**.
- Click **Test** to test the component on the selected device.

Note: Click ✕ to remove the device override and revert to the device associated with the application instance.

7. Enter or select the appropriate information in the *SMTP Port Check component fields* (on page 70).
8. Click **Save** to save your changes or click **Save and Close** to complete your changes.

SMTP Port Check component fields

You may configure the following boxes for the SMTP Port Check component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

> **Note**: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Protocol**. Select TCP, UDP, or SSL from the list. The network type for the FTP (File Transfer Protocol) service is TCP; the network type for the RADIUS (Remote Authentication and Dial-In User Service) service is UDP. The HTTPS monitor uses the SSL type.
- **Port number**. Enter the port number that you want to monitor.
- **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.
- **Script to Run**. Enter your script using as many `Send`, `Expect`, `SimpleExpect`, and `Flow Control` keywords as you want. For more information, see Script Syntax.
- **Expect**. (Optional) Click to open the *Rules Expression Editor* (on page **Error! Bookmark not defined.**) and test a string of text for particular patterns.

Adding a Time Port Check component

The Time Port Check component allows you to create a script to run on a specific device that monitors a designated TCP, UDP, SSL network port using the Time protocol. You may add a Time Port Check component to an application profile or an application instance.

> **Note**: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add a Time Port Check component to an application profile:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Network Port Check** to expand the dialog controls used to add the component(s).
5. Specify the number of components you want to add by clicking the up and down arrows next to **Time**.
6. Click **Add Selected**.
7. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.

8 Select a device from the navigation tree on which to test the individual component and click **OK**.

9 Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

> **Note**: If no test device is selected, the component is tested on the test device associated with the application profile.
>
> Test devices are not saved as part of the application profile.

10 Enter or select the appropriate information in the *Time Port Check component boxes* (on page 73).

11 Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add a Time Port Check component to an application instance:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application instance for which you want to add a component.

3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **Network Port Check**, then specify the number of components you want to add by clicking the up and down arrows next to **Time**.

5 Click **Add Selected**.

6 Enter or select the appropriate information:

- **Enabled**. Select this option to enable or disable the component.
- **Action Policy**. Select an action policy from the list for the component.
- **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
  - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

  - Select a device from the navigation tree on which to test the individual component and click **OK**.
  - Click **Test** to test the component on the selected device.

> **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

7 Enter or select the appropriate information in the *Time Port Check component boxes* (on page 73).

8 Click **Save** to save your changes or click **Save and Close** to complete your changes.

Time Port Check component fields

You may configure the following boxes for the Time Port Check component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

> **Note**: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Protocol**. Select TCP, UDP, or SSL from the list. The network type for the FTP (File Transfer Protocol) service is TCP; the network type for the RADIUS (Remote Authentication and Dial-In User Service) service is UDP. The HTTPS monitor uses the SSL type.
- **Port number**. Enter the port number that you want to monitor.
- **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.
- **Script to Run**. Enter your script using as many `Send`, `Expect`, `SimpleExpect`, and `Flow Control` keywords as you want. For more information, see Script Syntax.
- **Expect**. (Optional) Click to open the *Rules Expression Editor* (on page **Error! Bookmark not defined.**) and test a string of text for particular patterns.

Adding an SNMP Process Check component

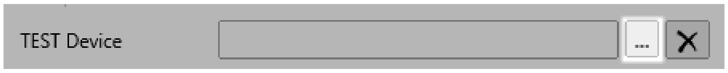
The SNMP Process Check component allows you to monitor a process on a specific device using the Simple Network Management Protocol (SNMP). You may add an SNMP Process Check component to an application profile or an application instance.

> **Note**: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add an SNMP Process Check component to an application profile:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.
3. Click **Add Components**. The Component Library appears.

4. Click the arrow next to **Process Check** to expand the dialog controls used to add the component(s).
5. Specify the number of components you want to add by clicking the up and down arrows next to **SNMP**.
6. Click **Add Selected**.
7. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8. Select a device from the navigation tree on which to test the individual component and click **OK**.
9. Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

Note: If no test device is selected, the component is tested on the test device associated with the application profile.

Test devices are not saved as part of the application profile.

10. Enter or select the appropriate information in the *SNMP Process Check component boxes* (on page 75).
11. Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add an SNMP Process Check component to an application instance:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application instance for which you want to add a component.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Process Check**, then specify the number of components you want to add by clicking the up and down arrows next to **SNMP**.
5. Click **Add Selected**.
6. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component.
   - **Action Policy**. Select an action policy from the list for the component.
   - **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
     - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

Important: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

     - Select a device from the navigation tree on which to test the individual component and click **OK**.

- Click **Test** to test the component on the selected device.

> **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

7 Enter or select the appropriate information in the *SNMP Process Check component boxes* (on page 75).

8 Click **Save** to save your changes or click **Save and Close** to complete your changes.

SNMP Process Check component fields

You may configure the following boxes for the SNMP Process Check component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

> **Note**: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Process Name**. Click browse (**...**) open the device browser and select the specific device and process you would like to monitor.
- **Down if not running**. Select this option to put the application in a down state if the process is not running.
- **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.
- **Poller retries**. Enter the number of times APM attempts to send the command before the device is considered down.

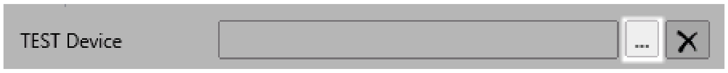
Adding a WMI Process Check component

The WMI Process Check component allows you to monitor a process on a specific device using Windows Management Instrumentation (WMI). You can add a WMI Process Check component to an application profile or an application instance.

> **Note**: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add a WMI Process Check component to an application profile:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Process Check** to expand the dialog controls used to add the component(s).
5. Specify the number of components you want to add by clicking the up and down arrows next to **WMI**.
6. Click **Add Selected**.
7. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8. Select a device from the navigation tree on which to test the individual component and click **OK**.
9. Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

> **Note**: If no test device is selected, the component is tested on the test device associated with the application profile.
>
> Test devices are not saved as part of the application profile.

10. Enter or select the appropriate information in the *WMI Process Check component boxes* (on page 77).
11. Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add a WMI Process Check component to an application instance:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application instance for which you want to add a component.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Process Check**, then specify the number of components you want to add by clicking the up and down arrows next to **WMI**.
5. Click **Add Selected**.
6. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component.
   - **Action Policy**. Select an action policy from the list for the component.
   - **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
     - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

- Select a device from the navigation tree on which to test the individual component and click **OK**.
- Click **Test** to test the component on the selected device.

> **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

7 Enter or select the appropriate information in the *WMI Process Check component boxes* (on page 77).

8 Click **Save** to save your changes or click **Save and Close** to complete your changes.

WMI Process Check component fields

You may configure the following boxes for the WMI Process Check component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

> **Note**: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Process Name**. Click browse (**...**) open the device browser and select the specific device and process you would like to monitor.
- **Down if not running**. Select this option to put the application in a down state if the process is not running.

Adding a PowerShell Execution Check component

Windows PowerShell is a scripting language and command-line shell that system administrators can use to manage Windows operating systems. For more information on PowerShell, please visit the *Microsoft web site* (http://www.whatsupgold.com/MSPowerShell). The PowerShell Execution component allows you to run a PowerShell script and analyze the output. You may add a PowerShell Execution component to an application profile or an application instance.

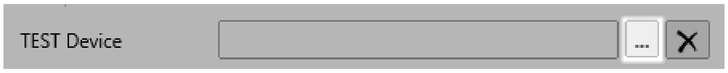
Note: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

Important: WhatsUp Gold uses a 32-bit (i.e. x86) PowerShell engine. Therefore, only 32-bit PowerShell snap-ins are supported and 64-bit only snap-ins will not function properly. Snap-ins usable in both 32-bit and 64-bit operating systems are configured for 64-bit systems by default and must be manually configured for 32-bit PowerShell engine to function properly with WhatsUp Gold.

Note: If you are using additional pollers with WhatsUp Gold, PowerShell must be installed and any desired snap-ins must be registered identically on all poller machines for any PowerShell performance monitors, active monitors, and actions to function properly. Associated errors resulting from failed monitors will appear in the WhatsUp Gold Status Center. Errors resulting from failed actions will appear in the WhatsUp Gold Event Viewer.

To add a PowerShell Execution component to an application profile:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Scripting** to expand the dialog controls used to add the component(s).
5. Specify the number of components you want to add by clicking the up and down arrows next to **PowerShell**.
6. Click **Add Selected**.
7. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8. Select a device from the navigation tree on which to test the individual component and click **OK**.
9. Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

Note: If no test device is selected, the component is tested on the test device associated with the application profile.

Test devices are not saved as part of the application profile.

10. Enter or select the appropriate information in the *PowerShell Execution component boxes* (on page 79).
11. Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add a PowerShell Execution component to an application instance:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application instance for which you want to add a component.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **Scripting**, then specify the number of components you want to add by clicking the up and down arrows next to **PowerShell**.
5. Click **Add Selected**.
6. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component.
   - **Action Policy**. Select an action policy from the list for the component.
   - **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
     - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

     - Select a device from the navigation tree on which to test the individual component and click **OK**.
     - Click **Test** to test the component on the selected device.

> **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

7. Enter or select the appropriate information in the *PowerShell Execution component boxes* (on page 79).
8. Click **Save** to save your changes or click **Save and Close** to complete your changes.

PowerShell Execution component fields

You may configure the following boxes for the PowerShell Execution component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

> **Note**: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Script timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.
- **Add a Reference Variable**. Click to open the Reference Variable dialog and add a reference variable to the component.
- **Run under device credentials**. Select this check box to execute the script using the Windows credentials for the affected device. For additional information, see Using the Credentials Library.
- **Script to Run**. Enter your script to return a single, numeric value.
- **Warning threshold**. Enter the component thresholds for the warning state. For example, if the component value is greater than 90 for 5 minutes, put the component in the warning state.
- **Down threshold**. Enter the component thresholds for the down state. For example, if the component value is greater than 95 for 5 minutes, put the component in the down state.

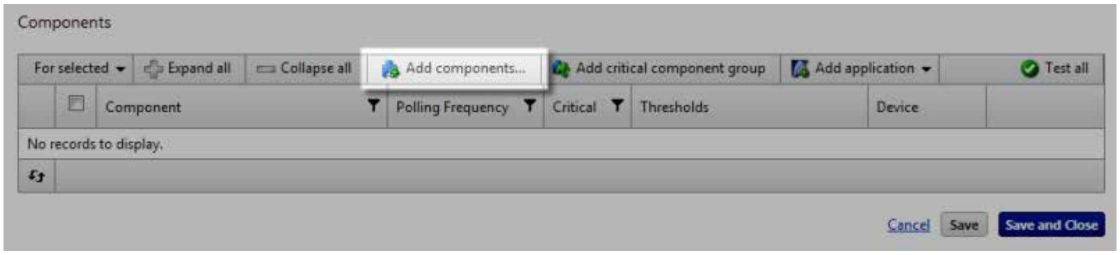
Adding an End User Monitoring component

The End User Monitoring (EUM) component allows you to monitor the success of a specific automated user activity based on a script you enter when initially configuring the component using the *End User Monitoring component boxes* (on page 83). To add an EUM component to an application profile, you must first install and register *iDrone* (on page 83) on a machine other than your WhatsUp Gold server. For information on installing and configuring iDrone, see *Installing* (on page 84) and *Configuring* (on page 84) iDrone. The script entered during EUM component configuration can be written manually or generated using the iMacros browser add-on. For information on iMacros, see *Using the iMacros add-on with iDrone* (on page 86).

Note: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add an EUM component to an application profile:

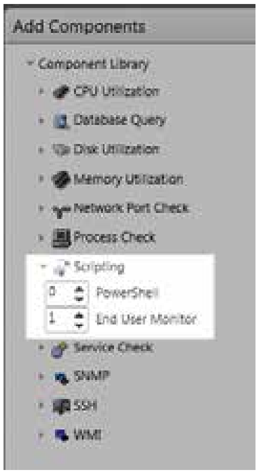
1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.
3. Click **Add Components**.



The Component Library appears.

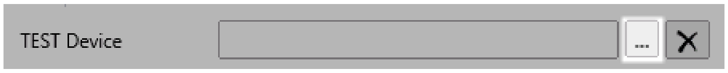
4 Click the arrow next to **Scripting** to expand the dialog controls used to add the component(s).

5 Specify the number of components you want to add by clicking the up and down arrows next to **End User Monitor**.



6 Click **Add Selected**.

7 Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8 Select a device from the navigation tree on which to test the individual component and click **OK**.

9 Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

Note: If no test device is selected, the component is tested on the test device associated with the application profile.

Test devices are not saved as part of the application profile.

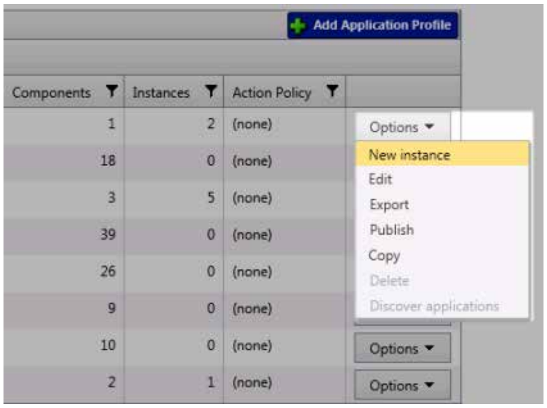
10 Enter or select the appropriate information in the *End User Monitoring component boxes* (on page 83).

11 Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add an End User Monitoring component to an application instance:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select **New Instance** from the **Options** list associated with the application profile you want to edit.



Components	Instances	Action Policy
1	2	(none)
18	0	(none)
3	5	(none)
39	0	(none)
26	0	(none)
9	0	(none)
10	0	(none)
2	1	(none)

The Configure Application Instance page appears.

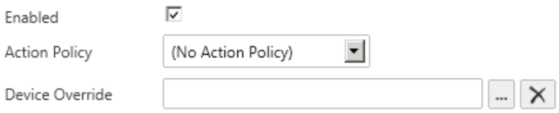
3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **Scripting** to view scripting component options.

5 Specify the number of components you want to add by clicking the up and down arrows next to **End User Monitor**. You can also enter a number in the **End User Monitor** box manually.

6 Click **Add Selected**.

7 Enter or select the appropriate information:



Enabled	☑
Action Policy	(No Action Policy)
Device Override	

- **Enabled**. Select this option to enable or disable the component.
- **Action Policy**. Select an action policy from the list for the component.
- **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
  - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

Important: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

  - Select a device from the navigation tree on which to test the individual component and click **OK**.
  - Click **Test** to test the component on the selected device.

Note: Click ✕ to remove the device override and revert to the device associated with the application instance.

- **iDrone Name**. Select a previously installed and registered iDrone from the list.

8 Enter or select the appropriate information in the *End User Monitoring component boxes* (on page 83).

9 Click **Save** to save your changes or click **Save and Close** to complete your changes.

End User Monitoring component boxes

You may configure the following boxes for the End User Monitoring component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

Note: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Browser type**. The internet browser used to perform the user activity.

✓ **Important**: The browser type must be set to match the browser used to record the script used by the iDrone. For more information, see *About iDrone* (on page 83) and *Using iMacros* (on page 86).

- **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.
- **Poller retries**. Enter the number of times the iDrone should attempt to execute its script in the event of an initial failure.
- **Script text**. Enter a script (either manually or copied and pasted from iMacros) for the iDrone to execute.
- **Warning threshold**. Enter the component thresholds for the warning state. For example, if the component value is greater than 90 for 5 minutes, put the component in the warning state.
- **Down threshold**. Enter the component thresholds for the down state. For example, if the component value is greater than 95 for 5 minutes, put the component in the down state.

✓ **Important**: The EUM component returns threshold values in milliseconds.

About iDrone

iDrone is the poller used by APM for automatically monitoring and reporting the success or failure of a specific end user activity. Once installed and registered with WhatsUp Gold, the iDrone utilizes scripts or macros (generated by iMacros) to automatically test application performance without user interaction. When *adding an End User Monitoring component* (on page 80) to an application profile in APM, you must select an active iDrone for use with the component prior to saving changes to the application profile. An End User Monitoring component cannot be created without an iDrone.

Note: If you use the APM plug-in End User Monitoring (EUM) component to automatically test application performance, you must install the iDrone poller on a machine other than the WhatsUp Gold server. Then, in order for iDrone to communicate with the WhatsUp Gold APM plug-in, make sure that .NET Framework 3.5 is installed on the WhatsUp Gold system.

Installing iDrone

The WhatsUp Gold iDrone installation file can be downloaded *here* (http://www.whatsupgold.com/WUGidrone). The file must be installed on a dedicated virtual machine with no other third-party software installed on the system.

Note: If you use the APM plug-in End User Monitoring (EUM) component to automatically test application performance, you must install the iDrone poller on a machine other than the WhatsUp Gold server. Then, in order for iDrone to communicate with the WhatsUp Gold APM plug-in, make sure that .NET Framework 3.5 is installed on the WhatsUp Gold system.

To install iDrone:

1 Double-click the executable file. If the Open File - Security Warning dialog appears, click **Run**. The AlertFox iDrone Setup Wizard launches.

2 Click **Next**. The Set Destination Location dialog appears.

3 Click **Browse** and navigate to or enter the location where you want to install iDrone.

4 Click **Next**. The Ready To Install dialog appears.

5 Click **Install**. After installation is complete, a dialog indicating it is necessary to restart your computer to complete the setup appears.

6 Select the applicable radio button indicating your preference.

7 Click **Finish**. If you indicated you would like to restart your computer now, your machine automatically shut down and restart.

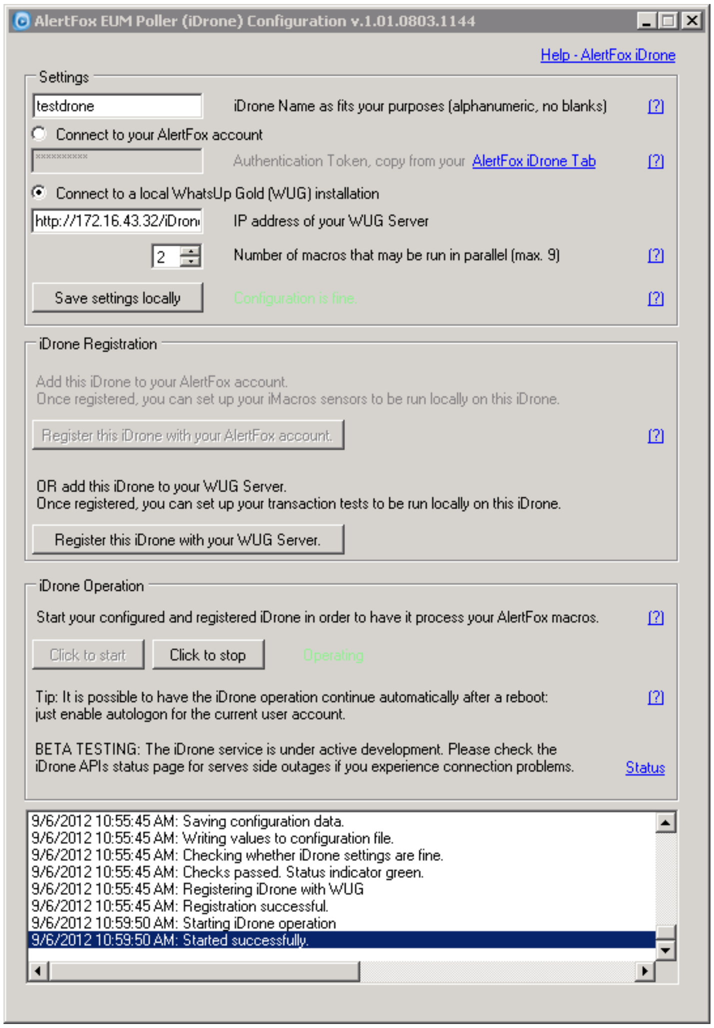
Configuring iDrone

The iDrone Configuration dialog is launched following iDrone installation. The dialog is organized in three sections:

§ **Settings**. iDrone is named and associated with an existing WhatsUp Gold installation.

§ **Registration**. iDrone is registered establishing communication with WhatsUp Gold.

- **Operation**. iDrone polling is started and stopped.



AlertFox EUM Poller (iDrone) Configuration v.1.01.0803.1144

Help - AlertFox iDrone

Settings

testdrone — iDrone Name as fits your purposes (alphanumeric, no blanks) [?]

○ Connect to your AlertFox account

********** — Authentication Token, copy from your AlertFox iDrone Tab [?]

● Connect to a local WhatsUp Gold (WUG) installation

http://172.16.43.32/iDron — IP address of your WUG Server

2 — Number of macros that may be run in parallel (max. 9) [?]

Save settings locally — Configuration is fine [?]

iDrone Registration

Add this iDrone to your AlertFox account.
Once registered, you can set up your iMacros sensors to be run locally on this iDrone.

Register this iDrone with your AlertFox account. [?]

OR add this iDrone to your WUG Server.
Once registered, you can set up your transaction tests to be run locally on this iDrone.

Register this iDrone with your WUG Server.

iDrone Operation

Start your configured and registered iDrone in order to have it process your AlertFox macros. [?]

Click to start — Click to stop — Operating

Tip: It is possible to have the iDrone operation continue automatically after a reboot: [?]
just enable autologon for the current user account.

BETA TESTING: The iDrone service is under active development. Please check the
iDrone APIs status page for serves side outages if you experience connection problems. Status

```
9/6/2012 10:55:45 AM: Saving configuration data.
9/6/2012 10:55:45 AM: Writing values to configuration file.
9/6/2012 10:55:45 AM: Checking whether iDrone settings are fine.
9/6/2012 10:55:45 AM: Checks passed. Status indicator green.
9/6/2012 10:55:45 AM: Registering iDrone with WUG
9/6/2012 10:55:45 AM: Registration successful.
9/6/2012 10:59:50 AM: Starting iDrone operation
9/6/2012 10:59:50 AM: Started successfully.
```

To configure iDrone:

1 Enter a name for your iDrone in the data entry field under **Settings**.

2 Click the radio button indicating you want to **Connect to a local WhatsUp Gold (WUG) installation**.

3 Enter the IP address of your WhatsUp Gold server and include the specific location of the required iDroneComAPI.asmx file on the server.

> **Important**: If your WhatsUp Gold server is configured to use SSL only, the URL needs to include `https://` at the beginning and the IP address or host name needs to match the common name on the certificate. Additionally, the certificate needs to reside in the trusted root certification authority store for the local machine where the iDrone is installed.

4 Specify the number of macros may be run in parallel to one another.

5 Click **Register this iDrone with your WUG Server**. The status window at the bottom of the dialog indicates Registration successful.

6 Click **Click to start** to activate the iDrone.

Using the iMacros add-on with iDrone

iMacros is a browser add-on that allows you to record browser activity in order to create a macro for use with iDrone. If iMacros is not automatically installed and launched during the iDrone installation process, it can be downloaded *here* (http://www.whatsupgold.com/WUGidrone). After downloading, access iMacros by clicking the icon located next to the address window or in the toolbar of your browser.

To record a macro:

1 Navigate to the website on which you want to generate a macro.

2 Select the **Rec** tab in the iMacros sidebar.

3 Click **Record**.

4 After you have completed the actions you want to use to generate the macro, click Stop. The macro you just recorded appears in the navigation tree in the iMacros sidebar with a filename of `#Current.iim`.

To save a macro:

1 Select `#Current.iim` or any other macro displayed you want to save with a different filename.

2 Select the **Rec** tab in the iMacros sidebar.

3 Click **Save**. A Save File dialog appears.

4 Enter a new name for the file in the Name box. You can also use this dialog to modify the location of the macro file if desired.

5 Click **OK**.

To edit a macro:

1 Select the desired macro from the navigation tree.

2 Click the **Edit** tab.

3 Click **Edit Macro**. An iMacros Editor dialog appears.

4 Modify the script as needed.

5 Click **Save & Close**.

Adding an SNMP Service Check component

The SNMP Service Check component allows you to use SNMP credentials to monitor a service on a specific device. You may add an SNMP Service Check component to an application profile or an application instance.

> **Note**: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add an SNMP Service Check component to an application profile:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.

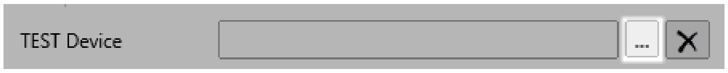
3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **Service Check** to expand the dialog controls used to add the component(s).

5 Specify the number of components you want to add by clicking the up and down arrows next to **SNMP**.

6 Click **Add Selected**.

7 Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8 Select a device from the navigation tree on which to test the individual component and click **OK**.

9 Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

> **Note**: If no test device is selected, the component is tested on the test device associated with the application profile.
>
> Test devices are not saved as part of the application profile.

10 Enter or select the appropriate information in the *SNMP Service Check component boxes* (on page 88).

11 Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add an SNMP Service Check component to an application instance:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application instance for which you want to add a component.

3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **Service Check**, then specify the number of components you want to add by clicking the up and down arrows next to **SNMP**.

5 Click **Add Selected**.

6 Enter or select the appropriate information:

- **Enabled**. Select this option to enable or disable the component.
- **Action Policy**. Select an action policy from the list for the component.
- **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
  - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

✓ **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

- Select a device from the navigation tree on which to test the individual component and click **OK**.
- Click **Test** to test the component on the selected device.

Note: Click ✕ to remove the device override and revert to the device associated with the application instance.

7 Enter or select the appropriate information in the *SNMP Service Check component boxes* (on page 88).

8 Click **Save** to save your changes or click **Save and Close** to complete your changes.

SNMP Service Check component fields

You may configure the following boxes for the SNMP Service Check component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

Note: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Service Name**. Click browse (**...**) to bring up the device browser and select the specific device and service you want to monitor.
- **Restart on failure**. Select this option to have the monitor attempt to restart the service when it enters a down state.
- **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.
- **Poller retries**. Enter the number of times APM attempts to send the command before the device is considered down.

Adding a WMI Service Check component

The WMI Service Check component allows you to use WMI credentials to monitor a service on a specific device. You may add a WMI Service Check component to an application profile or an application instance.

Note: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add a WMI Service Check component to an application profile:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.

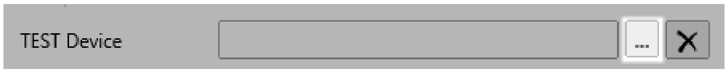
3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **Service Check** to expand the dialog controls used to add the component(s).

5 Specify the number of components you want to add by clicking the up and down arrows next to **WMI**.

6 Click **Add Selected**.

7 Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8 Select a device from the navigation tree on which to test the individual component and click **OK**.

9 Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

Note: If no test device is selected, the component is tested on the test device associated with the application profile.

Test devices are not saved as part of the application profile.

10 Enter or select the appropriate information in the *WMI Service Check component boxes* (on page 90).

11 Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add a WMI Service Check component to an application instance:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application instance for which you want to add a component.

3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **Service Check**, then specify the number of components you want to add by clicking the up and down arrows next to **WMI**.

5 Click **Add Selected**.

6 Enter or select the appropriate information:

§ **Enabled**. Select this option to enable or disable the component.

§ **Action Policy**. Select an action policy from the list for the component.

- **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
    - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

Important: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

- Select a device from the navigation tree on which to test the individual component and click **OK**.
- Click **Test** to test the component on the selected device.

Note: Click ✕ to remove the device override and revert to the device associated with the application instance.

7. Enter or select the appropriate information in the *WMI Service Check component boxes* (on page 90).
8. Click **Save** to save your changes or click **Save and Close** to complete your changes.

WMI Service Check component fields

You may configure the following boxes for the WMI Service Check component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

Note: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Service Name**. Click browse (**...**) to bring up the device browser and select the specific device and service you want to monitor.
- **Restart on failure**. Select this option to have the monitor attempt to restart the service when it enters a down state.

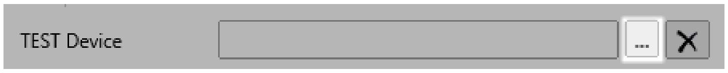
Adding an SNMP Check component

The SNMP Check component allows you to use SNMP credentials to monitor a specific application instance running on a device. You may add an SNMP Check component to an application profile or an application instance.

Note: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add an SNMP component to an application profile:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **SNMP** to expand the dialog controls used to add the component(s).
5. Specify the number of components you want to add by clicking the up and down arrows next to **SNMP**.
6. Click **Add Selected**.
7. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8. Select a device from the navigation tree on which to test the individual component and click **OK**.
9. Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

Note: If no test device is selected, the component is tested on the test device associated with the application profile.

Test devices are not saved as part of the application profile.

10. Enter or select the appropriate information in the *SNMP Check component boxes* (on page 92).
11. Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add an SNMP Check component to an application instance:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application instance for which you want to add a component.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **SNMP**, then specify the number of components you want to add by clicking the up and down arrows next to **SNMP**.
5. Click **Add Selected**.
6. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component.
   - **Action Policy**. Select an action policy from the list for the component.

§ **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.

§ Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

Important: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

§ Select a device from the navigation tree on which to test the individual component and click **OK**.

§ Click **Test** to test the component on the selected device.

Note: Click ✕ to remove the device override and revert to the device associated with the application instance.

7 Enter or select the appropriate information in the *SNMP Check component boxes* (on page 92).

8 Click **Save** to save your changes or click **Save and Close** to complete your changes.

SNMP Check component fields

You may configure the following boxes for the SNMP Check component:

§ **Name**. Enter a unique name for the component.

§ **Description**. (Optional) Enter additional information about the component.

§ **Critical**. Click to select this check box if the component is critical.

Note: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

§ **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.

§ **Performance Counter**. The performance counter you would like to monitor.

§ **Instance**. Click browse (**...**) to access the SNMP MIB browser and select the specific device, performance counter, and application instance you want to monitor.

§ **Use raw value**. Select this check box to gauge the current polled value instead of tracking the rate of change over time.

§ **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.

§ **Poller retries**. Enter the number of times APM attempts to send the command before the device is considered down.

- **Warning threshold**. Enter the component thresholds for the warning state. For example, if the component value is greater than 90 for 5 minutes, put the component in the warning state.
- **Down threshold**. Enter the component thresholds for the down state. For example, if the component value is greater than 95 for 5 minutes, put the component in the down state.

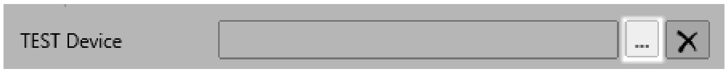
Adding an SSH Active Monitor Check component

The SSH Active Monitor Check component allows you to run a command on a specific device and analyze the output.

Note: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add an SSH Active Monitor Check component to an application profile:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **SSH** to expand the dialog controls used to add the component(s).
5. Specify the number of components you want to add by clicking the up and down arrows next to **Active**.
6. Click **Add Selected**.
7. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8. Select a device from the navigation tree on which to test the individual component and click **OK**.
9. Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

Note: If no test device is selected, the component is tested on the test device associated with the application profile.

Test devices are not saved as part of the application profile.

10. Enter or select the appropriate information in the *SSH Active Monitor Check component boxes* (on page 96).
11. Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add an SSH Active Monitor Check component to an application instance:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application instance for which you want to add a component.

3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **SSH**, then specify the number of components you want to add by clicking the up and down arrows next to **Active**.

5 Click **Add Selected**.

6 Enter or select the appropriate information:

§ **Enabled**. Select this option to enable or disable the component.

§ **Action Policy**. Select an action policy from the list for the component.

§ **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.

§ Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

§ Select a device from the navigation tree on which to test the individual component and click **OK**.

§ Click **Test** to test the component on the selected device.

> **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

7 Enter or select the appropriate information in the *SSH Active Monitor Check component boxes* (on page 96).

8 Click **Save** to save your changes or click **Save and Close** to complete your changes.

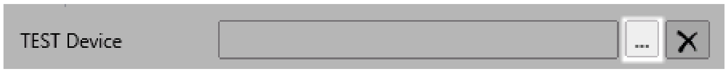
Adding an SSH Performance Monitor Check component

The SSH Performance Monitor Check component allows you to run a command on a specific device and analyze the output. You may add an SSH Performance Monitor Check component to an application profile or an application instance.

> **Note**: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add an SSH Performance Monitor Check component to an application profile:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **SSH** to expand the dialog controls used to add the component(s).
5. Specify the number of components you want to add by clicking the up and down arrows next to **Performance**.
6. Click **Add Selected**.
7. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8. Select a device from the navigation tree on which to test the individual component and click **OK**.
9. Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

> **Note**: If no test device is selected, the component is tested on the test device associated with the application profile.
>
> Test devices are not saved as part of the application profile.

10. Enter or select the appropriate information in the *SSH Performance Monitor Check component boxes* (on page 96).
11. Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add an SSH Performance Monitor Check component to an application instance:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application instance for which you want to add a component.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **SSH**, then specify the number of components you want to add by clicking the up and down arrows next to **Performance**.
5. Click **Add Selected**.
6. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component.
   - **Action Policy**. Select an action policy from the list for the component.
   - **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
     - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

Important: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

- Select a device from the navigation tree on which to test the individual component and click **OK**.
- Click **Test** to test the component on the selected device.

Note: Click ✕ to remove the device override and revert to the device associated with the application instance.

7 Enter or select the appropriate information in the *SSH Performance Monitor Check component boxes* (on page 96).

8 Click **Save** to save your changes or click **Save and Close** to complete your changes.

SSH Performance Monitor Check component fields

You may configure the following boxes for the SSH Performance Monitor Check component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

Note: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Command to run**. Enter the command to execute on the device. This command can be anything that a device can interpret and run; for example, a basic UNIX command or Perl script.
- **SSH Credential**. Select the appropriate SSH credential that APM will use to connect to the remote device.
- **Warning threshold**. Enter the component thresholds for the warning state. For example, if the component value is greater than 90 for 5 minutes, put the component in the warning state.
- **Down threshold**. Enter the component thresholds for the down state. For example, if the component value is greater than 95 for 5 minutes, put the component in the down state.

SSH Active Monitor Check component fields

You may configure the following boxes for the SSH Active Monitor Check component:

- **Name**. Enter a unique name for the component.
- **Description**. (Optional) Enter additional information about the component.
- **Critical**. Click to select this check box if the component is critical.

> **Note**: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

- **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.
- **Command to run**. Enter the command to execute on the device. This command can be anything that a device can interpret and run; for example, a basic UNIX command or Perl script.
- **Output to match**. Enter the output that should match the command result.
- **Up if matches**. Select this option to put the application in the up state if the output matches.
- **Use regex**. Select to use a regular expression to evaluate the match.

Adding a WMI Formatted Counter Check component

The WMI Formatted Counter Check component allows you to use Windows credentials to monitor a specific application instance running on a device. You may add a WMI Formatted Counter Check component to an application profile or an application instance.

> **Note**: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add a WMI Formatted Counter Check component to an application profile:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.

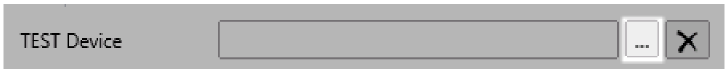
3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **WMI** to expand the dialog controls used to add the component(s).

5 Specify the number of components you want to add by clicking the up and down arrows next to **Formatted**.

6 Click **Add Selected**.

7 Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8 Select a device from the navigation tree on which to test the individual component and click **OK**.

9 Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

> **Note**: If no test device is selected, the component is tested on the test device associated with the application profile.
>
> Test devices are not saved as part of the application profile.

10 Enter or select the appropriate information in the *WMI Formatted Counter Check component boxes* (on page 99).

11 Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add a WMI Formatted Counter Check component to an application instance:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application instance for which you want to add a component.

3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **WMI**, then specify the number of components you want to add by clicking the up and down arrows next to **Formatted**.

5 Click **Add Selected**.

6 Enter or select the appropriate information:

- **Enabled**. Select this option to enable or disable the component.
- **Action Policy**. Select an action policy from the list for the component.
- **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
  - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> ✓ **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

  - Select a device from the navigation tree on which to test the individual component and click **OK**.
  - Click **Test** to test the component on the selected device.

> **Note**: Click ✕ to remove the device override and revert to the device associated with the application instance.

7 Enter or select the appropriate information in the *WMI Formatted Counter Check component boxes* (on page 99).

8 Click **Save** to save your changes or click **Save and Close** to complete your changes.

WMI Formatted Counter Check component fields

You may configure the following boxes for the WMI Formatted Counter Check component:

§ **Name**. Enter a unique name for the component.

§ **Description**. (Optional) Enter additional information about the component.

§ **Critical**. Click to select this check box if the component is critical.

> **Note**: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

§ **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.

§ **Performance Counter**. The performance counter you would like to monitor.

§ **Instance**. Click browse (**...**) to access the SNMP MIB browser and select the specific device, performance counter, and application instance you want to monitor.

§ **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.

§ **Warning threshold**. Enter the component thresholds for the warning state. For example, if the component value is greater than 90 for 5 minutes, put the component in the warning state.

§ **Down threshold**. Enter the component thresholds for the down state. For example, if the component value is greater than 95 for 5 minutes, put the component in the down state.

Adding a WMI Raw Counter Check component

The WMI Raw Counter Check component allows you to use Windows credentials to monitor a specific application instance running on a device. You may add a WMI Raw Counter Check component to an application profile or an application instance.

> **Note**: *Adding components to an application profile* (on page 17) helps create the foundation of the application profile. After adding components to an application profile, you must *create an instance to monitor a device* (on page 102). *Learn more about APM terminology* (on page 2).

To add a WMI Raw Counter Check component to an application profile:

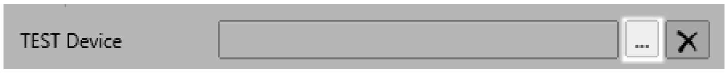
1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application profile for which you want to add a component, then click **Edit/View Application Profile**. The Components list appears.

3 Click **Add Components**. The Component Library appears.

4 Click the arrow next to **WMI** to expand the dialog controls used to add the component(s).

5. Specify the number of components you want to add by clicking the up and down arrows next to **Raw**.
6. Click **Add Selected**.
7. Click browse (**...**) next to the TEST Device box to launch the Select a Device dialog.



8. Select a device from the navigation tree on which to test the individual component and click **OK**.
9. Click **Test** to test the component on the selected device (optional). To remove the device override and revert to the device associated with the application component, click ✕.

> **Note**: If no test device is selected, the component is tested on the test device associated with the application profile.
>
> Test devices are not saved as part of the application profile.

10. Enter or select the appropriate information in the *WMI Raw Counter Check component boxes* (on page 101).
11. Click **Save** to save your changes or click **Save and Close** to complete your changes.

To add a WMI Raw Counter Check component to an application instance:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application instance for which you want to add a component.
3. Click **Add Components**. The Component Library appears.
4. Click the arrow next to **WMI**, then specify the number of components you want to add by clicking the up and down arrows next to **Raw**.
5. Click **Add Selected**.
6. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component.
   - **Action Policy**. Select an action policy from the list for the component.
   - **Device Override**. (Optional) Override the device associated with the instance and designate a specific device to assign to the component.
     - Click browse (**...**) next to the Device Override box to launch the Select a Device dialog.

> **Important**: If the device you want to use is configured with a WhatsUp Gold down dependency, make sure that you use a cloned device for this device selection in the Application Performance Monitoring plug-in. For more information, see the Dependencies overview.

     - Select a device from the navigation tree on which to test the individual component and click **OK**.
     - Click **Test** to test the component on the selected device.

Note: Click ✕ to remove the device override and revert to the device associated with the application instance.

7 Enter or select the appropriate information in the *WMI Raw Counter Check component boxes* (on page 101).

8 Click **Save** to save your changes or click **Save and Close** to complete your changes.

WMI Raw Counter Check component fields

You may configure the following boxes for the WMI Raw Counter Check component:

§ **Name**. Enter a unique name for the component.

§ **Description**. (Optional) Enter additional information about the component.

§ **Critical**. Click to select this check box if the component is critical.

Note: Components specified as critical cause the application to go into a down state when the component is out of threshold. Non-critical components cause the application to go into a warning state. For more information on application states, see *Working with application states* (on page 132).

§ **Polling frequency**. Select a time (in minutes or hours) you want APM to wait between polls.

§ **Performance Counter**. The performance counter you would like to monitor.

§ **Instance**. Click browse (**...**) to access the SNMP MIB browser and select the specific device, performance counter, and application instance you want to monitor.

§ **Polling timeout**. Enter the length of time APM attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and APM stops trying to connect to the device. This is considered a failed connection.

§ **Warning threshold**. Enter the component thresholds for the warning state. For example, if the component value is greater than 90 for 5 minutes, put the component in the warning state.

§ **Down threshold**. Enter the component thresholds for the down state. For example, if the component value is greater than 95 for 5 minutes, put the component in the down state.

Working with application instances

Application Performance Monitoring (APM) allows you to *create an instance or multiple instances* (on page 102) to monitor your applications. Each instance is created from *an application profile* (on page 15) and inherits the components associated with that profile. *Inherited components* (on page 103) are linked to the application profile. This means that any changes to the application profile result in the associated application instance(s) being changed as well.

For example, if you create an application instance called "My Device". This application instance is created using an application profile containing the following components:

- § CPU Utilization
- § Disk Utilization
- § Physical Memory Utilization

You also decide to add a fourth component, Virtual Memory Utilization, to this instance. When the application profile is updated, the first three inherited components will be updated as well (unless you override their values). The fourth component that you added to the instance will remain unchanged. This allows you to customize your application instances to fit your needs, while providing you with basic application profiles that you can use as your building blocks for creating application instances. *Learn more about APM terminology* (on page 2).

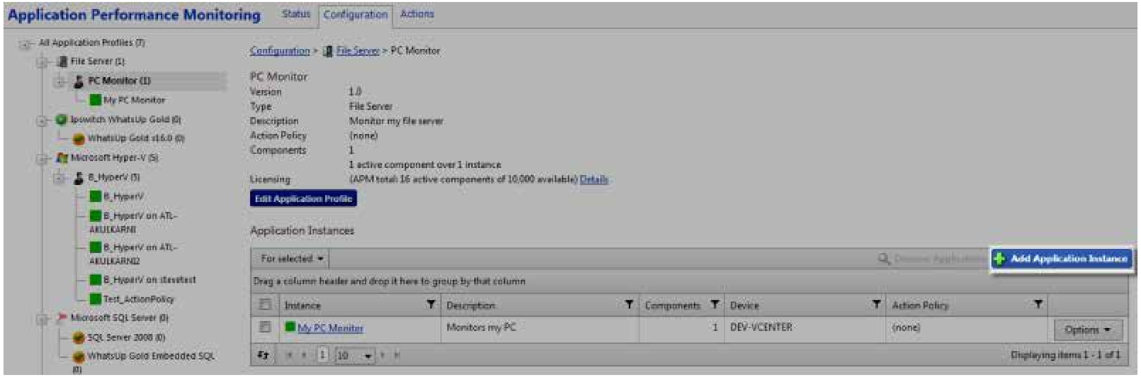
Creating an application instance

After an *application profile* (on page 15) has been created, you may create an instance from the application profile that includes the application(s) you want to monitor.

To create an application instance from an application profile:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select an application profile, then click **Add Application Instance** associated with an application profile.



PC Monitor

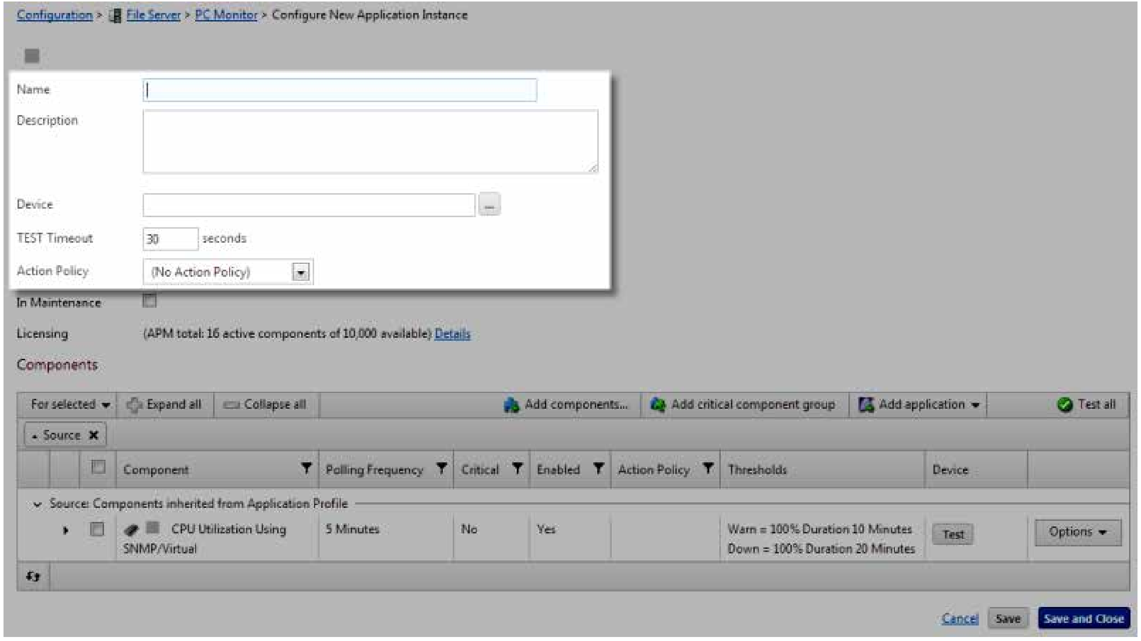
Version	1.0
Type	File Server
Description	Monitor my file server
Action Policy	(none)
Components	1 1 active component over 1 instance
Licensing	(APM total: 16 active components of 10,000 available) Details

Application Instances

Drag a column header and drop it here to group by that column

□	Instance	Description	Components	Device	Action Policy	
□	🟩 My PC Monitor	Monitors my PC	1	DEV-VCENTER	(none)	Options

The Configure New Application Instance page appears.



Configuration > File Server > PC Monitor > Configure New Application Instance

Name

Description

Device

TEST Timeout 30 seconds

Action Policy (No Action Policy)

In Maintenance ☐

Licensing (APM total: 16 active components of 10,000 available) Details

Components

☐	Component	Polling Frequency	Critical	Enabled	Action Policy	Thresholds	Device	
Source: Components inherited from Application Profile								
☐	CPU Utilization Using SNMP/Virtual	5 Minutes	No	Yes		Warn = 100% Duration 10 Minutes Down = 100% Duration 20 Minutes	Test	Options

3 Enter or select the appropriate information:

- **Name**. Enter a unique name for the application instance.
- **Description**. (Optional) Enter additional information about the application instance.
- **Device**. Click browse (**...**) to select a device to save to the application instance.
- **TEST Timeout**. Use this box to indicate how long a component test should run prior to timeout.
- **Action Policy**. Select an action policy for the application instance.
- **In Maintenance**. Select this option to put the application instance in maintenance mode. While in maintenance mode, the application instance will not be monitored.

4 (Optional) *Configure the inherited profile components* (on page 103) of the application instance or *add new components* (on page 28), *add critical component groups* (on page 107), or *add discrete applications* (on page 110) to the application instance.

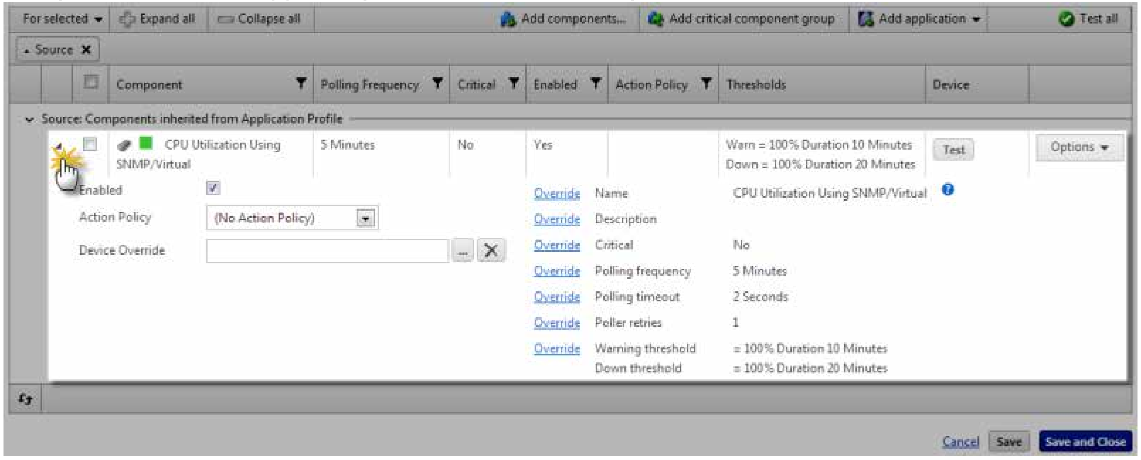
5 Click **Save** to save your changes or click **Save and Close** to complete your changes.

Configuring inherited profile components in an application instance

You can override certain values for components that are inherited from an application profile, but you cannot change values that change the purpose of the component. Any new components added to an instance can be configured, but will not be saved as part of the application profile. For example, if you create an instance to monitor the CPU utilization on a device using a preconfigured application profile, you cannot configure the inherited CPU Utilization component. You can, however, add components to the instance and configure as desired.

To configure inherited profile components in an application instance:

1. *Create an application instance* (on page 102) from a preconfigured application profile.
2. From the Configure Application Instance page with an instance selected, in the components list click (▶) to expand the desired component information.



Source: Components inherited from Application Profile

Component	Polling Frequency	Critical	Enabled	Action Policy	Thresholds	Device
CPU Utilization Using SNMP/Virtual	5 Minutes	No	Yes		Warn = 100% Duration 10 Minutes Down = 100% Duration 20 Minutes	

Enabled ☑

Action Policy (No Action Policy)

Device Override

Override	Name	CPU Utilization Using SNMP/Virtual
Override	Description	
Override	Critical	No
Override	Polling frequency	5 Minutes
Override	Polling timeout	2 Seconds
Override	Poller retries	1
Override	Warning threshold	= 100% Duration 10 Minutes
	Down threshold	= 100% Duration 20 Minutes

3. Enter or select the appropriate information:
   - **Enabled**. Select this option to enable or disable the component in the application instance.
   - **Action Policy**. Select an action policy for the component.
   - **Device Override**. Click browse (**...**) to override the device associated with the instance and designate a specific device to assign to the component.
   - If applicable, click **Override** next to the values you want to configure, and then designate a new value.
4. Click **Save** to save your changes or click **Save and Close** to complete your changes.

Working with critical component groups

A critical component group is a grouping of components that contains specific logic to allow for complex evaluation of the up/down state of an application. For example, given four components A,B,C and D, the following logic can be applied, so that if A and B are down or C and D are down the application is placed into the down state. ((A and B) or (C and D)). Critical component groups are always considered "critical", in that if a critical component group is evaluated to be in the down state, the entire application is in the down state. For example, you create a critical component group called *Device Utilization* and assign the following components to the group:

- CPU Utilization
- Disk Utilization
- Physical Memory Utilization
- Virtual Memory Utilization

You then assign the following *state logic* (on page 132) to the critical component group: If CPU Utilization and Virtual Memory Utilization equal Down and Disk Utilization equal Warning, then the component group is Down. Since this component group is considered "critical", the application instance that contains this critical component group would also be Down.

Note: After an instance has been created, each component uses *one license each* since they are individual components of an application instance.

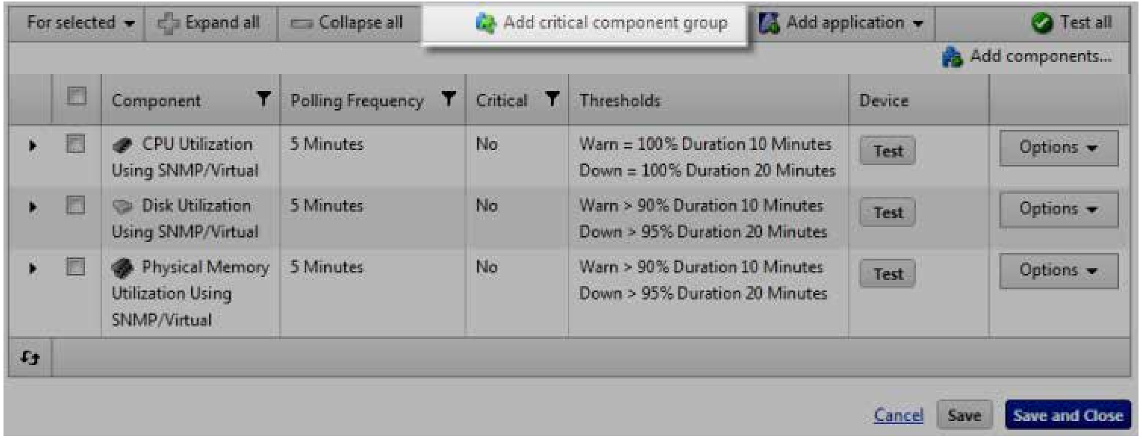
Learn more about APM terminology (on page 2).

Adding critical component groups to an application profile

There must be at least two components included in a critical component group. For more information, see *Working with critical component groups* (on page 104).

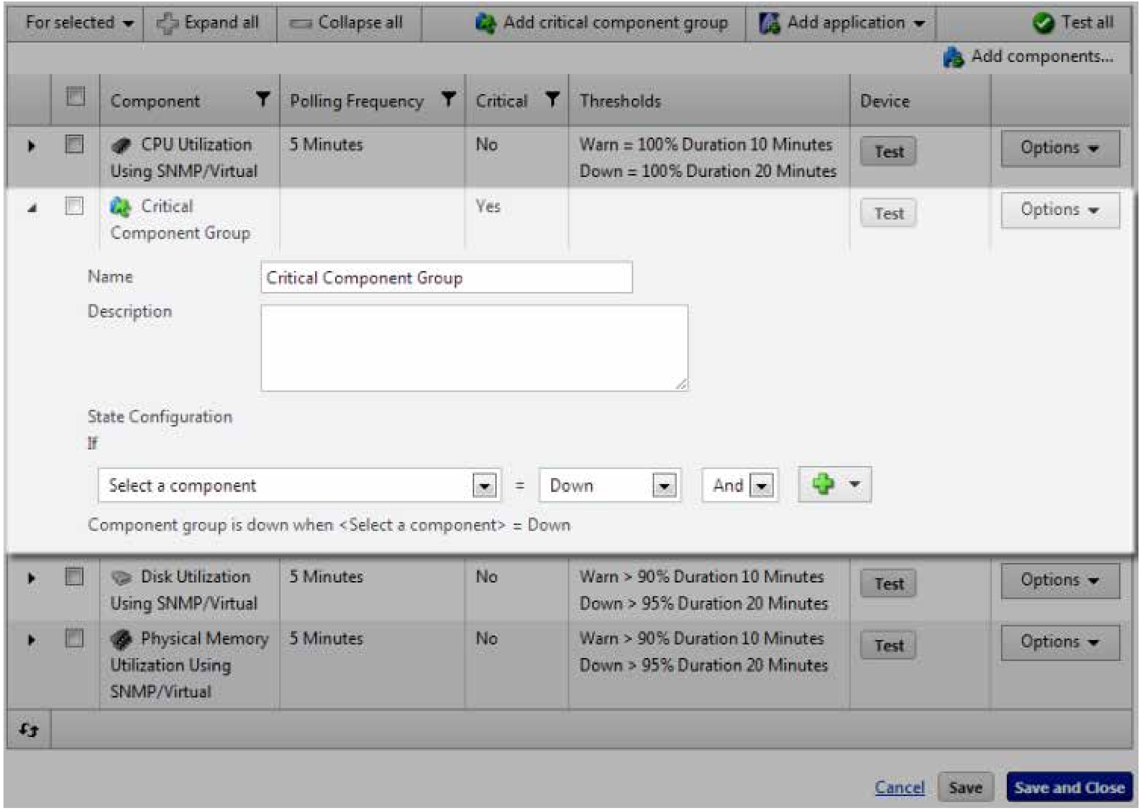
To add a critical component group to an application profile:

1. From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.
2. Select the application profile for which you want to add a critical component group, then click **Edit/View Application Profile**. The Components list appears.
3. In the Components section, click **Add critical component group**.



	□	Component	Polling Frequency	Critical	Thresholds	Device	
▸	□	CPU Utilization Using SNMP/Virtual	5 Minutes	No	Warn = 100% Duration 10 Minutes Down = 100% Duration 20 Minutes	Test	Options
▸	□	Disk Utilization Using SNMP/Virtual	5 Minutes	No	Warn > 90% Duration 10 Minutes Down > 95% Duration 20 Minutes	Test	Options
▸	□	Physical Memory Utilization Using SNMP/Virtual	5 Minutes	No	Warn > 90% Duration 10 Minutes Down > 95% Duration 20 Minutes	Test	Options

The Critical Component Group information appears.



Component	Polling Frequency	Critical	Thresholds	Device

CPU Utilization Using SNMP/Virtual	5 Minutes	No	Warn = 100% Duration 10 Minutes
			Down = 100% Duration 20 Minutes
				Test

Critical Component Group		Yes		Test
Disk Utilization Using SNMP/Virtual	5 Minutes	No	Warn > 90% Duration 10 Minutes Down > 95% Duration 20 Minutes	Test
Physical Memory Utilization Using SNMP/Virtual	5 Minutes	No	Warn > 90% Duration 10 Minutes Down > 95% Duration 20 Minutes	Test

Name: Critical Component Group

Description:

State Configuration

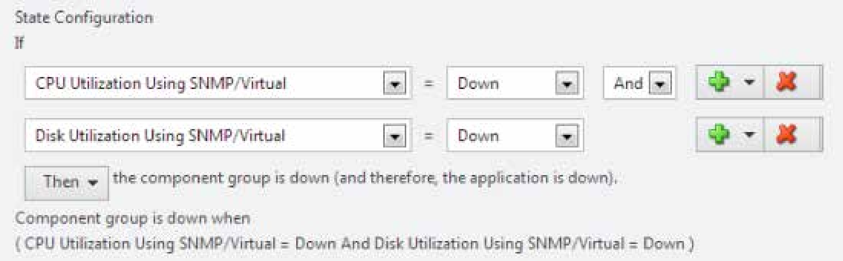
If

Select a component = Down And

Component group is down when <Select a component> = Down

4 Enter or select the appropriate information:

- **Name**. Enter a unique name for the critical component group.
- **Description**. (Optional) Enter additional information about the critical component group.
- **State Configuration**. Select a configuration for the critical component group. For example, if CPU Utilization component is down and the Disk Utilization component is down, then the component group is down.



State Configuration

If

CPU Utilization Using SNMP/Virtual = Down And

Disk Utilization Using SNMP/Virtual = Down

Then the component group is down (and therefore, the application is down).

Component group is down when

(CPU Utilization Using SNMP/Virtual = Down And Disk Utilization Using SNMP/Virtual = Down)

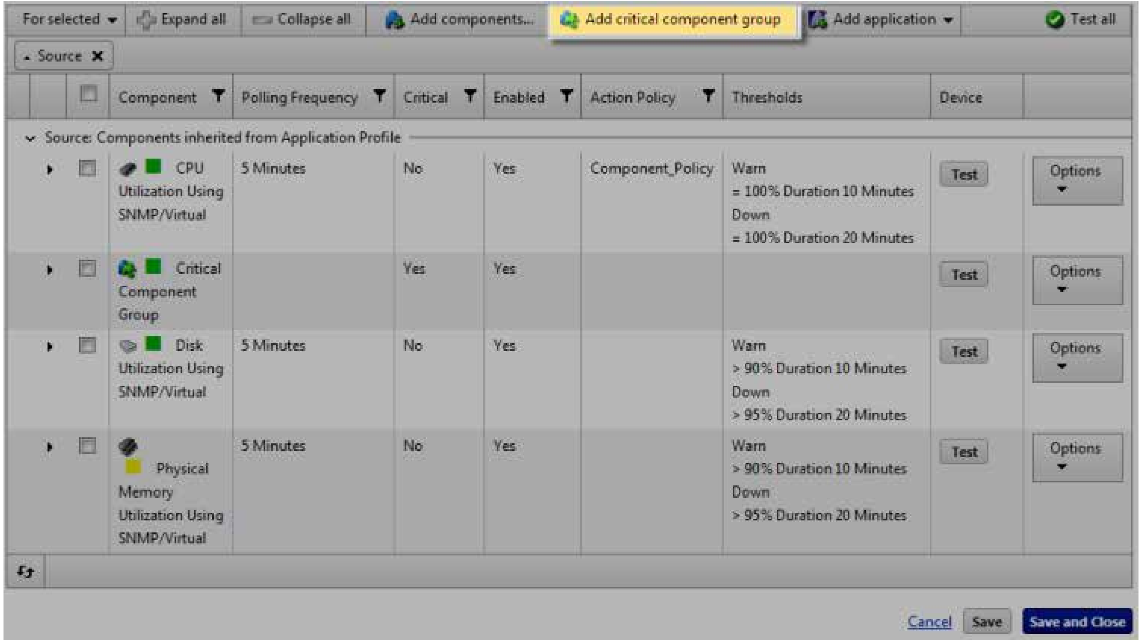
5 Click **Save** to save your changes or click **Save and Close** to complete your changes.

Learn more about APM terminology (on page 2)

Adding critical component groups to an application instance

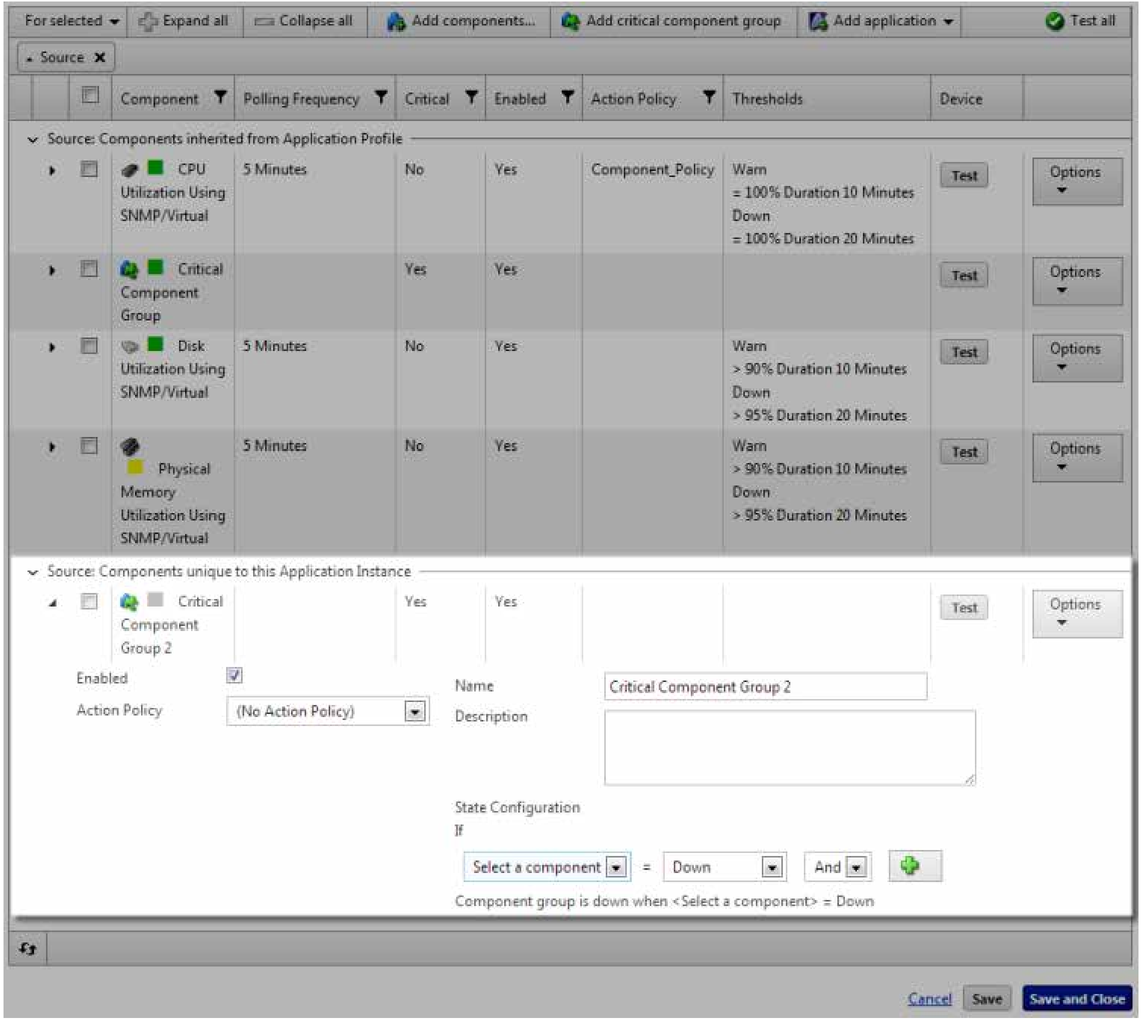
To add a critical component group to an application instance:

1. *Create an application instance* (on page 102).
2. In the Components section, click **Add critical component group**.



	□	Component	Polling Frequency	Critical	Enabled	Action Policy	Thresholds	Device	
▸	□	🟩 CPU Utilization Using SNMP/Virtual	5 Minutes	No	Yes	Component_Policy	Warn = 100% Duration 10 Minutes Down = 100% Duration 20 Minutes	Test	Options ▾
▸	□	🟩 Critical Component Group		Yes	Yes			Test	Options ▾
▸	□	🟩 Disk Utilization Using SNMP/Virtual	5 Minutes	No	Yes		Warn > 90% Duration 10 Minutes Down > 95% Duration 20 Minutes	Test	Options ▾
▸	□	🟨 Physical Memory Utilization Using SNMP/Virtual	5 Minutes	No	Yes		Warn > 90% Duration 10 Minutes Down > 95% Duration 20 Minutes	Test	Options ▾

The Critical Component Group information appears.



	Component	Polling Frequency	Critical	Enabled	Action Policy	Thresholds	Device	
Source: Components inherited from Application Profile								
☐	🟩 CPU Utilization Using SNMP/Virtual	5 Minutes	No	Yes	Component_Policy	Warn = 100% Duration 10 Minutes Down = 100% Duration 20 Minutes	Test	Options
☐	🟩 Critical Component Group		Yes	Yes			Test	Options
☐	🟩 Disk Utilization Using SNMP/Virtual	5 Minutes	No	Yes		Warn > 90% Duration 10 Minutes Down > 95% Duration 20 Minutes	Test	Options
☐	🟨 Physical Memory Utilization Using SNMP/Virtual	5 Minutes	No	Yes		Warn > 90% Duration 10 Minutes Down > 95% Duration 20 Minutes	Test	Options
Source: Components unique to this Application Instance								
☐	Critical Component Group 2		Yes	Yes			Test	Options

Enabled ☑

Action Policy (No Action Policy)

Name Critical Component Group 2

Description

State Configuration

If

Select a component = Down And

Component group is down when <Select a component> = Down

3 Enter or select the appropriate information:

- **Enabled**. Select this option to enable or disable the critical component group.
- **Action Policy**. Select an action policy for the critical component group.
- **Name**. Enter a unique name for the critical component group.
- **Description**. (Optional) Enter additional information about the critical component group.
- **State Configuration**. Select a configuration for the critical component group. For example, if CPU Utilization component is *down* and the Disk Utilization component is *down*, then the component group is *down*.

Note: When a critical component group is added to an application instance, not inherited from the profile, you must add additional unique components for the critical component group to evaluate for application states.

4 Click **Save** to save your changes or click **Save and Close** to complete your changes.

Working with discrete applications

A discrete application is an application upon which a complex application has a dependency. For example, IIS and SQL Server are discrete applications on which the complex application WhatsUp Gold is dependent. A discrete application is used when you are monitoring a complex application. You may *add a discrete application to an application profile* (on page 20) or *add a discrete application to an application instance* (on page 110) as a component. *Learn more about APM terminology* (on page 2).

> **Note**: Adding a discrete application to an application profile helps build the foundation of the profile, but does not add the discrete application to an application instance.

Adding discrete applications to an application profile

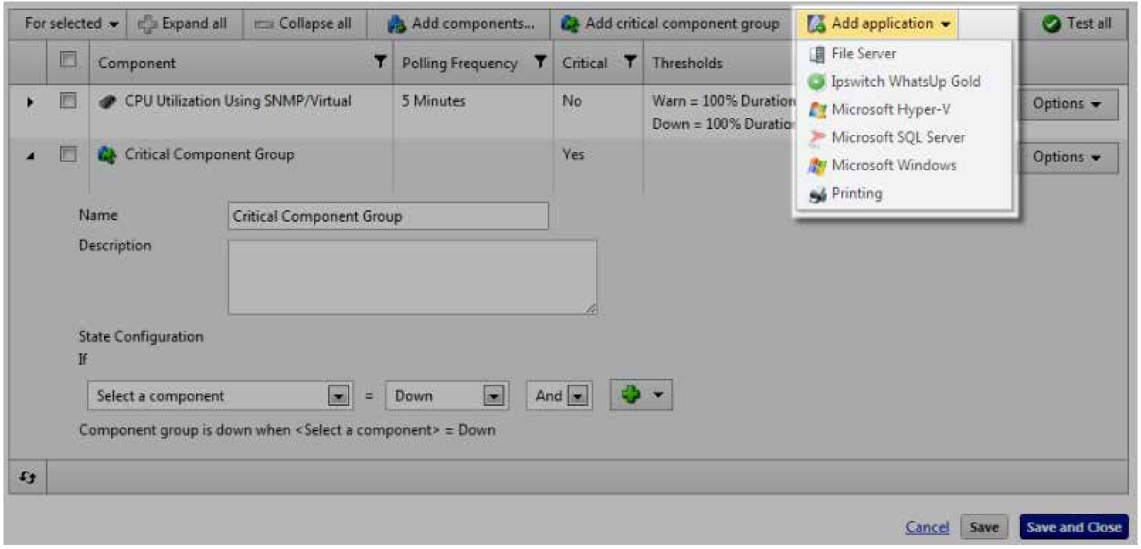
A discrete application is an application upon which a complex application has a dependency. For example, IIS and SQL Server are discrete applications on which the complex application WhatsUp Gold is dependent. A discrete application is used when you are monitoring a complex application. *Learn more about APM terminology* (on page 2).

To add a discrete application to an application profile:

1 From the WhatsUp Gold web interface, go to **APM > Configuration**. The All Application Profiles page appears.

2 Select the application profile for which you want to add a critical component group, then click **Edit/View Application Profile**. The Components list appears.

3 In the Components section, click **Add application**, then select an application profile type from the list.



	Component	Polling Frequency	Critical	Thresholds

□	CPU Utilization Using SNMP/Virtual	5 Minutes	No	Warn = 100% Duration
				Down = 100% Duratio

□	Critical Component Group		Yes	

Name: Critical Component Group

Description:

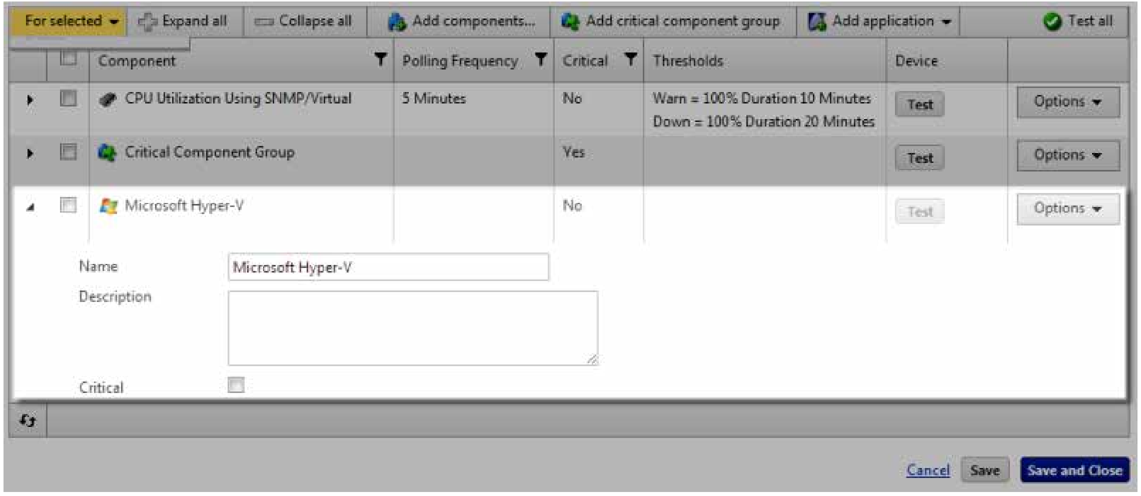
State Configuration

If

Select a component = Down And

Component group is down when <Select a component> = Down

The discrete application appears in the Components section.



Component	Polling Frequency	Critical	Thresholds	Device

CPU Utilization Using SNMP/Virtual	5 Minutes	No	Warn = 100% Duration 10 Minutes
			Down = 100% Duration 20 Minutes	

Critical Component Group		Yes		
Microsoft Hyper-V		No		

Name: Microsoft Hyper-V

Description:

Critical: □

4 Enter or select the appropriate information:

- **Name**. Enter a unique name for the discrete application.
- **Description**. (Optional) Enter additional information about the discrete application.
- **Critical**. Select this option if the discrete application is critical.

5 Click **Save** to save your changes or click **Save and Close** to complete your changes.

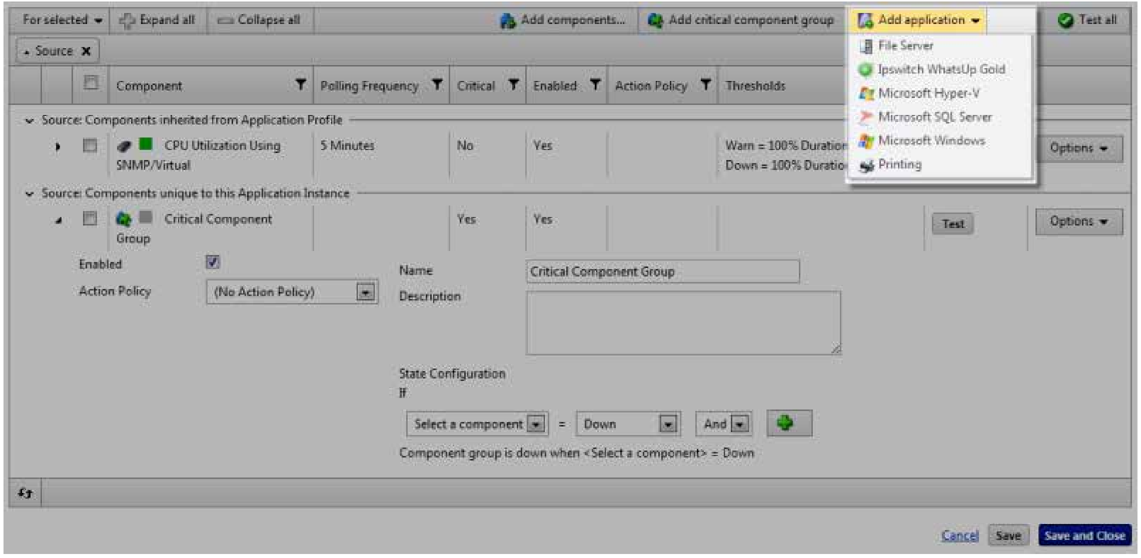
Adding discrete applications to an application instance

A discrete application is an application upon which a complex application has a dependency. For example, IIS and SQL Server are discrete applications on which the complex application WhatsUp Gold is dependent. A discrete application is used when you are monitoring a complex application. *Learn more about APM terminology* (on page 2).

To add a discrete application to an application instance:

1 *Create an application instance* (on page 102) from a preconfigured application profile.

2 In the Components section, click click **Add application**, then select an application.



Component	Polling Frequency	Critical	Enabled	Action Policy	Thresholds
Source: Components inherited from Application Profile					
CPU Utilization Using SNMP/Virtual	5 Minutes	No	Yes		Warn = 100% Duration Down = 100% Duratio
Source: Components unique to this Application Instance					
Critical Component Group		Yes	Yes		

Enabled: ☑

Action Policy: (No Action Policy)

Name: Critical Component Group

Description:

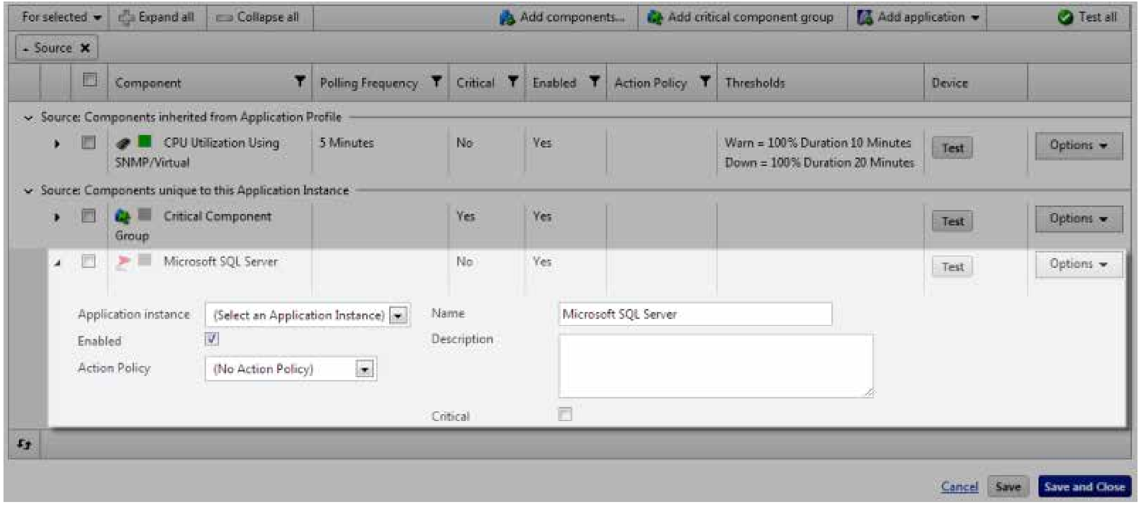
State Configuration

If

Select a component = Down And

Component group is down when <Select a component> = Down

The discrete application appears in the Components section.



Component	Polling Frequency	Critical	Enabled	Action Policy	Thresholds	Device
Source: Components inherited from Application Profile						
CPU Utilization Using SNMP/Virtual	5 Minutes	No	Yes		Warn = 100% Duration 10 Minutes Down = 100% Duration 20 Minutes	
Source: Components unique to this Application Instance						
Critical Component Group		Yes	Yes			
Microsoft SQL Server		No	Yes			

Application instance: (Select an Application Instance)

Enabled: ☑

Action Policy: (No Action Policy)

Name: Microsoft SQL Server

Description:

Critical: □

3 Enter or select the appropriate information:

- **Application instance**. Select the application instance to be monitored for the component.
- **Enabled**. Select this option to enable or disable the discrete application.
- **Action Policy**. Select an action policy for the discrete application.
- **Name**. Enter a unique name for the discrete application.
- **Description**. (Optional) Enter additional information about the discrete application.
- **Critical**. Select this option if the discrete application is critical.

4 Click **Save** to save your changes or click **Save and Close** to complete your changes.

CHAPTER 4

APM actions

In This Chapter

Working with action policies in APM

Application Performance Monitoring (APM) allows you to configure action policies that can be applied to application instances and components that you are monitoring with APM.

An action policy determines actions to take when an application instance or component transitions from one state to another. The transition to states are up, down, warning, and maintenance. You must create one or more actions before creating an action policy. You may also apply a blackout policy to the action policy. The blackout policy determines when to apply the action policy and when it should be ignored due to routine activities, such as maintenance periods.

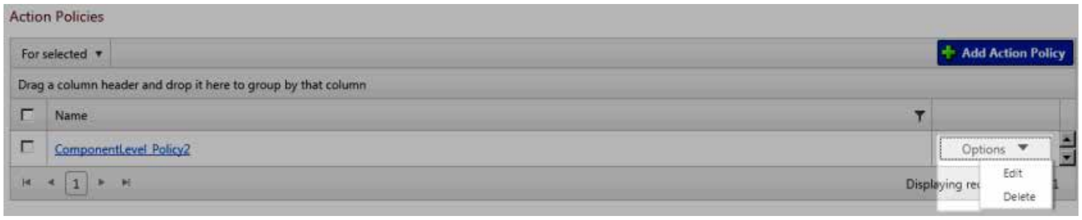
✓ **Important**: All applications and systems monitored with Application Performance Monitoring must have their system clocks synced so that Action Policies and Actions work correctly according to the settings and scheduled actions.

To access the action policies feature in the WhatsUp Gold web interface, go to **APM > Actions Management > Action Policies**.

Use the APM Action Policies page to configure new or existing policies.

§ Click **Add Action Policy** to configure a new action policy.

- Select an action policy, then click **Edit** in Options to modify its configuration.



Action Policies

For selected ▼
Add Action Policy
Drag a column header and drop it here to group by that column

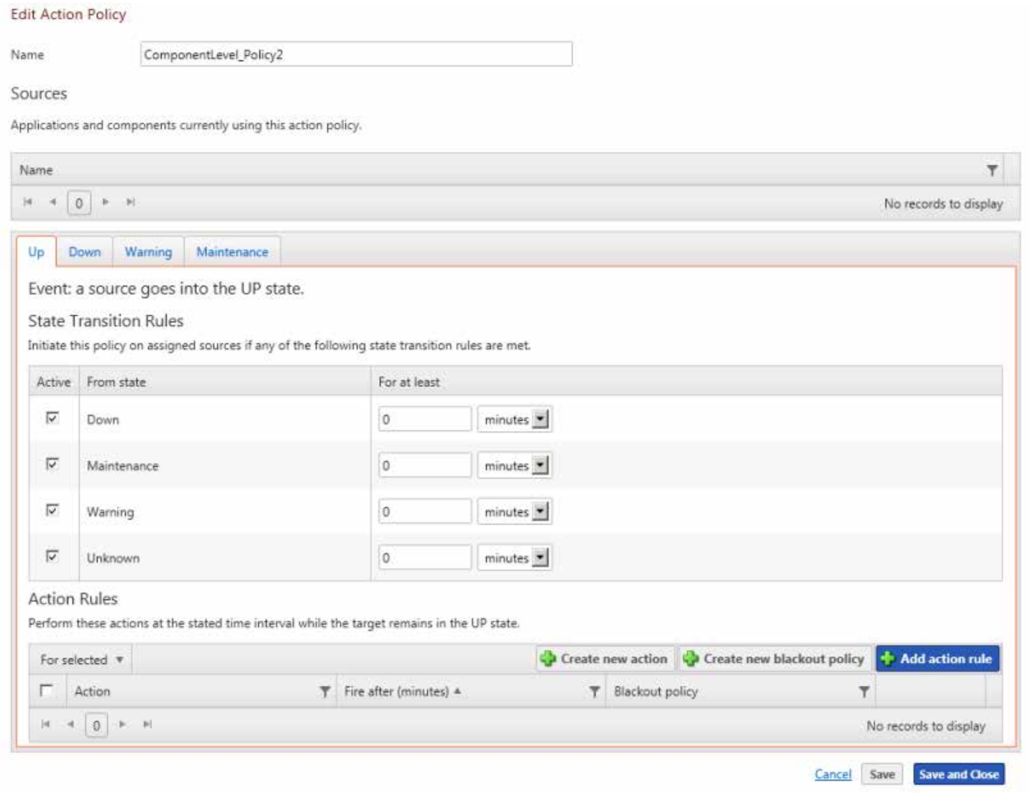
□	Name	
□	ComponentLevel_Policy2	Options ▼

1
Displaying re
Edit
Delete

- Select an action policy, then click **Delete** to remove it from the library.

Creating an action policy in APM

Action policies enable you to determine the actions you would like the system to perform when an instance or component transitions from one state to another. The state transition rules evaluate whether to permit the associated action to fire based on the amount of time the source was in a previous state. The action rules determine which action to fire, how long to wait in the target state before firing the action, and which blackout policy to apply. The blackout policy prohibits an action from firing during defined periods of time when activities such as server maintenance generate large numbers of actions that are not of interest.



Edit Action Policy

Name: ComponentLevel_Policy2

Sources

Applications and components currently using this action policy.

Name
No records to display

Event: a source goes into the UP state.

State Transition Rules

Initiate this policy on assigned sources if any of the following state transition rules are met.

Active	From state	For at least	
☑	Down	0	minutes
☑	Maintenance	0	minutes
☑	Warning	0	minutes
☑	Unknown	0	minutes

Action Rules

Perform these actions at the stated time interval while the target remains in the UP state.

□	Action	Fire after (minutes) ▲	Blackout policy

No records to display

Sources

The Sources area displays the application instances to which the application policy is applied.

State Transition Rules

State transition rules use the time in the previous state (state transition criteria) to evaluate whether to perform an associated action for each state transition type (Up to Down, Maintenance to Down, Warning to Down, Up to Unknown, etc.). If the source was in the previous state for the amount of time stated in the rule prior to transitioning to the current state, the action defined in the Action Rules section is performed. Using state transition criteria can help reduce the number of state transitions that cause an action to fire by ignoring state transitions that are short lived or intermittent.

For example, you can create a state transition rule that performs an email action when the source goes to the Down state (target current state) from the Up state (previous state) and had been in the Up state for at least 5 minutes prior to entering the Down state (state transition criteria). This state transition rule does not cause the action to fire for state transitions where the source was in the Down state for less than 5 minutes.

The state transition rules may be defined for the following current states, each represented by a separate tab:

§ **Up**. Designate the state transition rules for each event going to the Up state from Down, Maintenance, Warning, or Unknown.

§ **Down**. Designate the state transition rules for each event going to the Down state from Maintenance, Up, Warning, or Unknown.

§ **Warning**. Designate the state transition rules for each event going to the Warning state from Down, Maintenance, Up, or Unknown.

§ **Maintenance**. Designate the state transition rules for each event going to the Maintenance state from Down, Up, Warning, or Unknown.

Action Rules

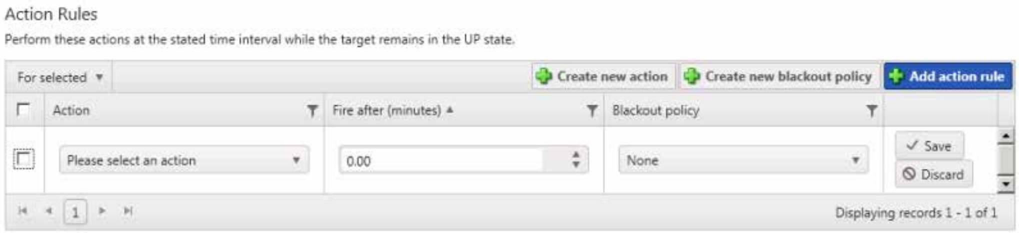
The Action Rules section allows you to designate the actions that occur when a State Transition Rule for the target current state is met. For example, you may assign the email action to occur when the source goes into the Up state from the Down state and remains in the up state for 5 minutes, after meeting the state transition rule of having been in the Down state for at least 10 minutes before transitioning to the Up state.

To create a new action policy in APM:

1. From the WhatsUp Gold web interface, go to **APM > Actions Management > Action Policies**. The Action Policies page appears.
2. Click **Add Action Policy**. The Edit Action Policy page appears.
3. Enter a unique **Name** for the Action Policy.
4. Select the **Up** tab and create the state transition and action rules for the Up state.
5. Select the **Down** tab and create the state transition and action rules for the Down state.
6. Select the **Warning** tab and create the state transition and action rules for the Warning state.
7. Select the **Maintenance** tab and create the state transition and action rules for the Maintenance state.
8. Click **Save** or **Save and Close**. The Action Policy is added to the Action Policies list on the Action Policies screen.

To create the state transition and action rules for transitions to the Up state:

1. If the associated actions are to be triggered from the Down to Up transition, select **Down** and enter the minimum amount of time the source must have been in the Down state prior to the transition.
2. If the associated actions are to be triggered from the Maintenance to Up transition, select **Maintenance** and enter the minimum amount of time the source must have been in the Maintenance state prior to the transition.
3. If the action is to be triggered by a transition from the Warning to Up transition, select **Warning** and enter the minimum amount of time the source must have been in the Warning state prior to the transition.
4. If the action is to be triggered by a transition from the Unknown to Up transition, select **Unknown** and enter the minimum amount of time the source must have been in the Unknown state prior to the transition.
5. Create the action rules to be associated with transitions to the Up state.



Action Rules

Perform these actions at the stated time interval while the target remains in the UP state.

   a) Click **Add action rule**. The Action rule dialog controls appear.

   b) Select an **Action** from the list of currently configure actions. If the list is empty, click **Create new action** to configure a new action for the policy.

   c) Enter the number of minutes to wait after entering the Up state before firing the action in the **Fire after (minutes)** box.

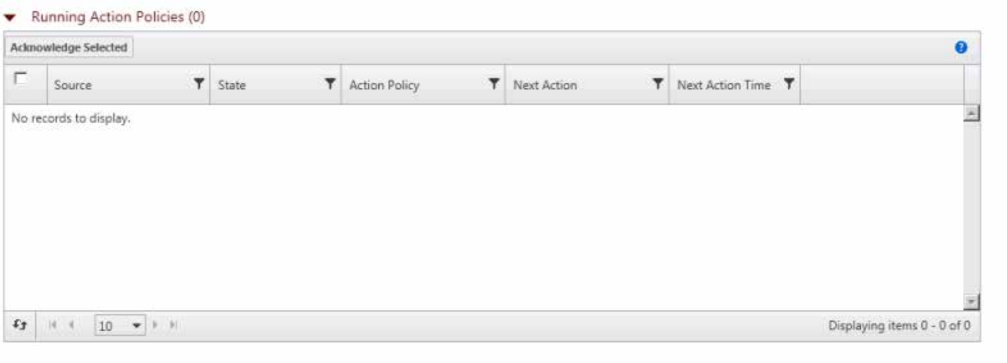
   d) Select the **Blackout policy** you want to apply to the action. If the list is empty, click **Create new blackout policy** to configure a new blackout policy for the action policy.

   e) Click **Save**. The action is added to the Actions list.

6. When you have completed configuring the policy, click **Save and Close**.

Managing Action Policies

Action Policies are managed from the Running Action Policies screen, accessible from the APM Status page (**APM > Status**), in the Current Status section of the page. Here you can see all of the Action Policies that are active in your APM environment. Information about the source being monitored by the policy, the current state, any actions taken, as well as the next action to be taken is visible in a table that can be filtered and sorted for quick access to the data about your action policies. You can also acknowledge any action policies with outstanding actions from this screen.



□	Source	State	Action Policy	Next Action	Next Action Time
No records to display.					

Displaying items 0 - 0 of 0

The following fields are available for filtering and sorting:

- **Source**. The application or component to which the Action Policy is being applied.
- **State**. The state of the application or component to which the Action Policy is being applied.
- **Action Policy**. The name of the Action Policy being applied to the application or component.
- **Most Recent Action**. The most recent action that has fired in response to a condition of the Action Policy.
- **Next Action**. The next action that will fire in response to a condition of the Action Policy.
- **Start Time**. The time at which the first condition was met that caused an action to fire in response to the Action Policy.

To acknowledge an action policy:

1. Select the action policy you want to acknowledge from the Running Action Policies list.
2. Click **Acknowledge Selected**.

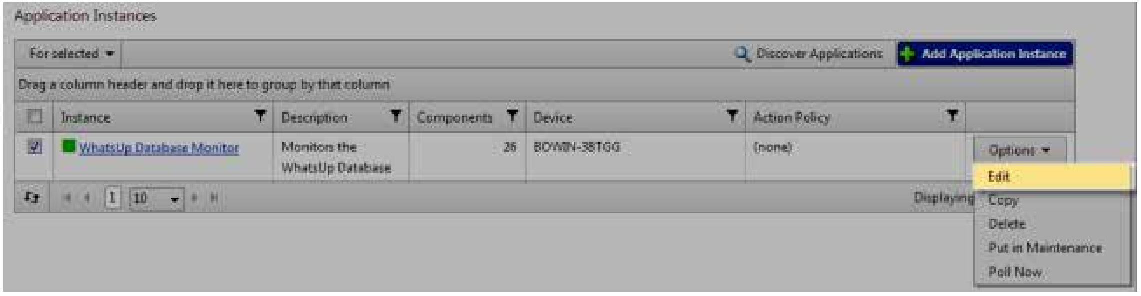
Assigning an action policy to an APM instance or component

After Application Performance Monitoring actions, action policies, and blackout policies are created, you can assign an action policy to an application instance or component.

To assign an action policy to an application instance or component:

1 From the Application Performance Monitoring Configuration tab, in the Application Profiles navigation tree, select the application profile component for which you want to add an action policy. The Application Instances appear.

2 Select the instance for which you want to add an action policy, then clcik **Edit**.

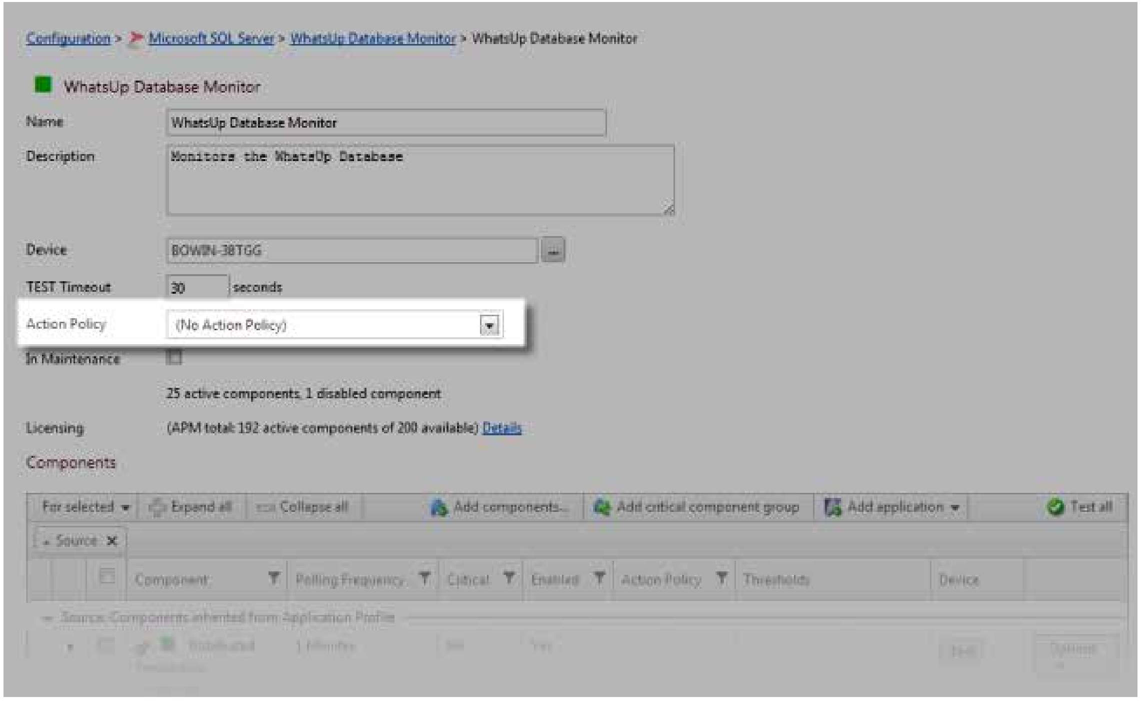


Application Instances

☐	Instance	Description	Components	Device	Action Policy	
☑	🟩 WhatsUp Database Monitor	Monitors the WhatsUp Database	26	BOWIN-38TGG	(none)	Options

The Components page appears.

3 In the Action Policy box, select the Action Policy you want to apply to all of the components in the instance.



Configuration > Microsoft SQL Server > WhatsUp Database Monitor > WhatsUp Database Monitor

🟩 WhatsUp Database Monitor

Name: WhatsUp Database Monitor

Description: Monitors the WhatsUp Database

Device: BOWIN-38TGG

TEST Timeout: 30 seconds

Action Policy: (No Action Policy)

In Maintenance: ☐

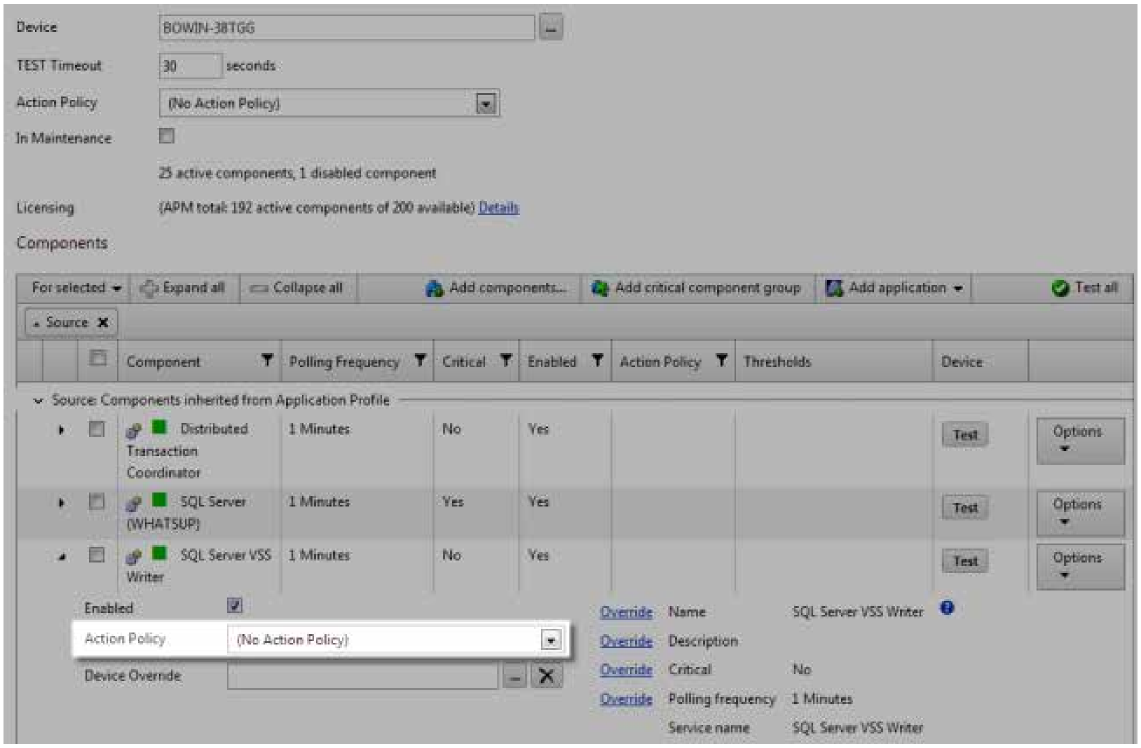
25 active components, 1 disabled component

Licensing: (APM total: 192 active components of 200 available) Details

Components

- or -

In the Components section below, expand a component you want to apply to a specific component.



Device	BOWIN-38TGG
TEST Timeout	30 seconds
Action Policy	(No Action Policy)
In Maintenance	□
	25 active components, 1 disabled component
Licensing	(APM total: 192 active components of 200 available) Details

Components

Source: Components inherited from Application Profile

	Component	Polling Frequency	Critical	Enabled	Action Policy	Thresholds		Device
□	Distributed Transaction Coordinator	1 Minutes	No	Yes			Test	Options
□	SQL Server (WHATSUP)	1 Minutes	Yes	Yes			Test	Options
□	SQL Server VSS Writer	1 Minutes	No	Yes			Test	Options

Enabled	☑
Action Policy	(No Action Policy)
Device Override	

Override	Name	SQL Server VSS Writer
Override	Description	
Override	Critical	No
Override	Polling frequency	1 Minutes
	Service name	SQL Server VSS Writer

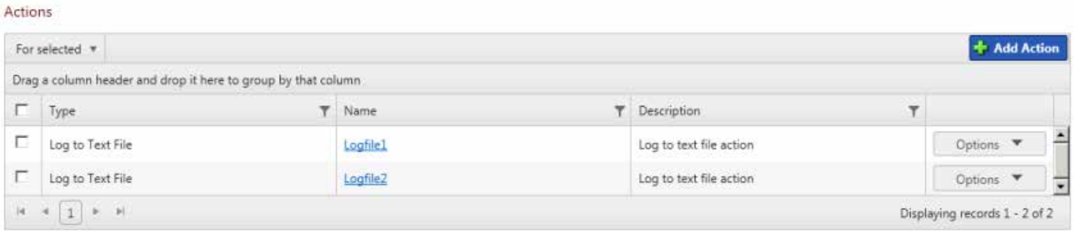
4 Select **Edit** from the Options menu associated with an action to modify an action's configuration.

5 Select **Delete** from the Options menu associated with an action to remove an action from the library.

Working with actions in APM

Application Performance Monitoring (APM) allows you to designate specific actions to execute when an application instance or component is outside of its action policy thresholds. For example, you may designate that an email is sent to your company email address each time an event occurs.

The access the Actions page in the WhatsUp Gold web interface, go to **APM > Actions,** then click **Actions** in the Actions Management tree.



Actions

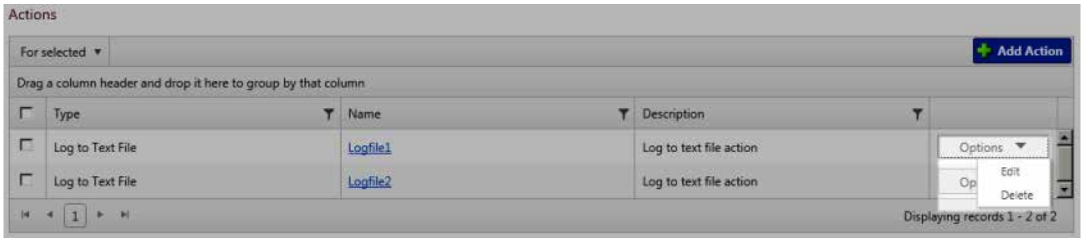
For selected
Add Action
Drag a column header and drop it here to group by that column

□	Type	Name	Description	
□	Log to Text File	Logfile1	Log to text file action	Options
□	Log to Text File	Logfile2	Log to text file action	Options

Displaying records 1 - 2 of 2

Use the APM Actions page to configure new or existing actions.

§ Click **Add Action** to *configure a new action* (on page 119).


Actions
For selected ▾
Add Action
Drag a column header and drop it here to group by that column
Options ▾
Edit
Delete
1
Displaying records 1 - 2 of 2

□	Type	Name	Description	
□	Log to Text File	Logfile1	Log to text file action	Options
□	Log to Text File	Logfile2	Log to text file action	Op

Creating an action in APM

To create a new action in APM:

1. From the WhatsUp Gold web interface, go to **APM > Actions,** then click **Actions** in the Actions Management tree. The Actions page appears.
2. Click **Add Action**. The Edit Action page appears.
3. Select an action from the **Action Type** list. You can add any of the following WhatsUp Gold action types: Active Script, Email, Log to Text File, Windows Event Log, PowerShell Script, Program, Service Restart, SMS, SMS Direct, SSH, Syslog, VMWare.

> **Tip**: Click the Help icon to the right of an action type to view information for that action type.

4. Enter the appropriate information:
   - § **Name**. Enter a unique name for the action.
   - § **Description**. (Optional) Enter additional information about the action.
5. Enter or select the appropriate information into each of the action boxes.
6. Click **Save** to save your changes or click **Save and Close** to complete your changes.

Adding an Active Script action

This action allows you to write either VBScript or JScript code to perform a customized action. If the script returns an error code, the action failed.

> **Note**: This script action has a context object you can use to get specific information about the context of the action.
>
> **Note**: We have provided several code samples for you to create useful script actions for your devices.
>
> **Note**: All script features in WhatsUp Gold utilize the SNMP API.

To add a new Active Script action:

1. From the WhatsUp Gold web interface, go to **APM > Actions,** then click **Actions** in the Actions Management tree. The Actions page appears.
2. Click **Add Action**. The Edit Action page appears.
3. Select **Active Script** from the **Action type** list. The boxes for the Active Script action appear.
4. Enter or select the appropriate information:

- **Name**. Enter a unique name for the action. This name displays in the Action Library.
- **Description**. (Optional) Enter additional information about the action. This description displays next to the action in the Action Library.
- **Timeout (seconds)**. Enter the length of time WhatsUp Gold attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout* occurs and WhatsUp Gold stops trying to connect to the SMTP server. This is considered a failed connection.

Note: Though the maximum timeout is 60 seconds, you are discouraged from using a timeout longer than the default of 10 seconds. You are encouraged to use the shortest timeout possible.

- **Script type**. Select the scripting language that you want to use to write this active script (either VBScript or JScript).
- **Script text**. Enter your action code here.

Note: We do not recommend that you use percent variables in script text, because they may resolve to text containing special characters (' ' (quotes), " " (double-quotes), % (percent), new line characters, and the like) that may break your script.

5 Click **Save**. The action is added to the Actions list.

Adding an E-mail action

The E-mail action sends an SMTP mail message to a specific e-mail account. An E-mail action can also be used as an e-mail notification in the WhatsUp Gold Alert Center. While you can configure this action on both the console and web interface, you can only configure the Alert Center notification message on the web.

To add an E-mail action:

1 From the WhatsUp Gold web interface, go to **APM > Actions,** then click **Actions** in the Actions Management tree. The Actions page appears.

2 Click **Add Action**. The Edit Action page appears.

3 Select **E-mail** from the **Action type** list. The boxes for the E-mail action appear.

4 Enter or select the appropriate information:

- **Name**. Enter a unique name for the action. This name displays in the Action Library.
- **Description**. (Optional) Enter additional information about the action. This description displays next to the action in the Action Library.

5 Complete the information on the **Configuration** tab. This tab contains options pertaining to the action e-mail destination.

- **SMTP Server**. Enter the IP address or Host (DNS) name of your e-mail server (SMTP mail host).
- **Port**. Enter the port number on which the SMTP server is listening.
- **Timeout (sec)**. Enter the length of time WhatsUp Gold attempts to connect to the selected device. When the time you enter is exceeded without connecting, a *timeout*

occurs and WhatsUp Gold stops trying to connect to the SMTP server. This is considered a failed connection.

- **Mail To**. Enter the email addresses to which you want to send the alert. Email addresses must be fully qualified. You can enter multiple addresses, separated by commas (but no spaces). The address should not contain brackets, braces, quotes, or parentheses.
- **Mail From**. Enter the email address you want to appear in the From field of the e-mail that is sent by the Email action.
- **SMTP server requires authentication**. Check this option if your SMTP server uses authentication. This enables the Username and Password boxes.

  The Email action supports three authentication types:

  - CRAM-MD5
  - login
  - plain

  The authentication type is not configurable. It is negotiated with the SMTP server automatically.
- **Username**. Enter the username for SMTP authentication.
- **Password**. Enter the password of the username for authentication.
- **Use an encrypted connection (SSL/TLS)**. Check this option if your SMTP server requires the data to be encrypted over a TLS connection (formerly known as SSL).

6 Complete the information on the **Mail Content** tab. This tab contains options pertaining to the action email message content.

- **Subject**. Enter a text message or edit the default message. You can use percent variable codes to display specific information in the subject.
- **Message body**. Enter a text message or edit the default message. You can use percent variable codes to display specific information in the message body.

Tip: (MR - 3/9/13 Not yet possible in APM email actions) You can add a link to either or both the Device Status and Mobile Device Status reports by clicking the appropriate button.

7 Click **Save**. The E-mail action is added to the Actions list.

Adding a Log-to-Text File action

The Log to Text action logs custom messages to specified text files.

To add a new Log to Text File action:

1 From the WhatsUp Gold web interface, go to **APM > Actions,** then click **Actions** in the Actions Management tree. The Actions page appears.

2 Click **Add Action**. The Edit Action page appears.

3 Select **Log to Text File** from the **Action type** list. The boxes for the Log To Text File action appear.

4 Enter or select the appropriate information:

§ **Name**. Enter a unique name for the action. This name displays in the Action Library.

§ **Description**. (Optional) Enter additional information about the action. This description displays next to the action in the Action Library.

§ **Log file**. Enter the full path to the location where the log file will bee written.

§ **Log file write mode**. Select **Append** to have log messages appended to the Log file. Select **Overwrite** to have log messages overwrite existing log messages.

§ **Log Message**. Enter the message that will be written to the log file. This message supports percent variables. The default log message is:

```
%Device.ActiveMonitorDownNames is %Device.State on %Device.Type:
%Device.HostName (%Device.Address).

Details:

Monitors that are down include: %Device.ActiveMonitorDownNames

Monitors that are up include: %Device.ActiveMonitorUpNames

Notes on this device (from device property page):

%Device.Notes

----------------------------------------

This message was logged on %System.Date at %System.Time

Ipswitch WhatsUp Gold
```

5 Click **Save**. The Log to Text File action is added to the actions list.

Adding a Windows Event Log action

The Windows Event Log action allows you to configure log messages to post to the Windows Event Viewer.

To add a Windows Event Log action:

1 From the WhatsUp Gold web interface, go to **APM > Actions,** then click **Actions** in the Actions Management tree. The Actions page appears.

2 Click **Add Action**. The Edit Action page appears.

3 Select **Windows Event Log** from the **Action type** list. The boxes for the Windows Event Log action appear.

4 Enter or select the appropriate information:

§ **Name**. Enter a unique name for the action. This name displays in the Action Library.

§ **Description**. (Optional) Enter additional information about the action. This description displays next to the action in the Action Library.

§ **Source**. The origin of messages logged to the Windows Event Viewer. The default source is the Ipswitch WhatsUp Log Action.

§ **Event ID**. Enter an event ID for the messages that are logged to the Windows Event Viewer. The default event ID is 1000, the WhatsUp engine event ID.

§ **Level**. Select a level for messages logged to the Windows Event Viewer. You can select Error, Warning, or Information. The default level is Error.

§ **Log Message**. Enter a log message that displays in the Windows Event Viewer. This message supports percent variables. The default log message is: %Device.ActiveMonitorDownNames is %Device.State on %Device.Type: %Device.HostName (%Device.Address).

```
Details:

Monitors that are down include: %Device.ActiveMonitorDownNames

Monitors that are up include: %Device.ActiveMonitorUpNames

Notes on this device (from device property page):

%Device.Notes

----------------------------------------

This message was logged on %System.Date at %System.Time

Ipswitch WhatsUp Gold
```

5 Click **Save**. The Windows Event Log action is added to the Actions list.

Adding a PowerShell Script action

The PowerShell action delivers a robust and flexible environment to the experienced user for developing custom actions through direct access to script component libraries, including the .NET Framework. For more information, see PowerShell action script examples.

> **Important**: WhatsUp Gold uses a 32-bit (i.e. x86) PowerShell engine. Therefore, only 32-bit PowerShell snap-ins are supported and 64-bit only snap-ins will not function properly. Snap-ins usable in both 32-bit and 64-bit operating systems are configured for 64-bit systems by default and must be manually configured for 32-bit PowerShell engine to function properly with WhatsUp Gold.
>
> If you are using additional pollers with WhatsUp Gold, PowerShell must be installed and any desired snap-ins must be registered identically on all poller machines for any PowerShell performance monitors, active monitors, and actions to function properly. Associated errors resulting from failed monitors will appear in the WhatsUp Gold Status Center. Errors resulting from failed actions will appear in the WhatsUp Gold Event Viewer.

To add a new PowerShell script action:

1 From the WhatsUp Gold web interface, go to **APM > Actions,** then click **Actions** in the Actions Management tree. The Actions page appears.

2 Click **Add Action**. The Edit Action page appears.

3 Select **PowerShell Script** from the **Action type** list. The boxes for the PowerShell Script action appear.

4 Enter or select the appropriate information:

§ **Name**. Enter a unique name for the action. This name displays in the Action Library.

§ **Description**. (Optional) Enter additional information about the action. This description displays next to the action in the Action Library.

§ **Timeout (seconds)**. Enter the length of time WhatsUp Gold attempts to connect to the selected device. When the time you enter is exceeded without connecting, a timeout occurs and WhatsUp Gold stops trying to connect to the device. This is considered a failed connection.

> **Note**: You are highly discouraged from using a timeout longer than 10 seconds. Please use the shortest timeout possible.

- **Use device credentials**. Select this check box to execute the script using the Windows credentials for the affected device. For additional information, see Using the Credentials Library.
- **Script Text.** Enter your action code.

5 Click **Save**. The PowerShell Script action is added to the actions list.

Adding a Program action

Program actions can be defined to launch an external application when a state change occurs.

To add a new Program action:

1 From the WhatsUp Gold web interface, go to **APM > Actions,** then click **Actions** in the Actions Management tree. The Actions page appears.

2 Click **Add Action**. The Edit Action page appears.

3 Select **Program** from the **Action type** list. The boxes for the Program action appear.

4 Enter or select the appropriate information:

- **Name**. Enter a unique name for the action. This name displays in the Action Library.
- **Description**. (Optional) Enter additional information about the action. This description displays next to the action in the Action Library.
- **Program file name**. Enter the file path where the working files for the application are stored.
- **Working path**. Enter the file path where the working files for the application are stored. The working path is located on the server where WhatsUp Gold is running.
- **Program arguments**. Enter any percent variables you want to pass to the specified program.

5 Click **Save**. The Program action is added to the actions list.

Adding a Service Restart action

To add a Service Restart action:

1 From the WhatsUp Gold web interface, go to **APM > Actions,** then click **Actions** in the Actions Management tree. The Actions page appears.

2 Click **Add Action**. The Edit Action page appears.

3 Select **Service Restart** from the **Action type** list. The boxes for the Service Restart action appear.

4 Enter or select the appropriate information:

- **Name**. Enter a unique name for the action. This name displays in the Action Library.

- **Description**. (Optional) Enter additional information about the action. This description displays next to the action in the Action Library.
- **Service**. Click browse (**...**) to select the desired service associated with your host.
- **Command**. Select either *Start* or *Stop*, depending on whether you want the associated alert to start or stop the service you have selected.

5. Click **Save** or **Save and Close**. The Service Restart action is added to the actions list.

Adding an SMS action

The SMS Action sends a Short Message Service (SMS) notification to a pager or cell phone using an email gateway or dial-up modem. An SMS Action can also be used as an SMS notification in the WhatsUp Gold Alert Center.

To add a new SMS action:

1. From the WhatsUp Gold web interface, go to **APM > Actions,** then click **Actions** in the Actions Management tree. The Actions page appears.
2. Click **Add Action**. The Edit Action page appears.
3. Select **SMS** from the **Action type** list. The boxes for the SMS action appear.
4. Enter or select the appropriate information:
   - **Name**. Enter a unique name for the action. This name displays in the Action Library.
   - **Description**. (Optional) Enter additional information about the action. This description displays next to the action in the Action Library.
   - **Country**. Select the country for the SMS provider.
   - **Provider**. Select the desired provider. If the provider list is incomplete and/or incorrect, you can click browse (**...**) to add, edit, or delete providers in this list.
   - **Mode**. Either *Email* or *Dialup*, depending on how the provider was created in the system.
   - **Email to**. If the connection setting is *Email*, enter the email address of the SMS device.
   - **Phone Number**. If the connection setting is *Dialup*, enter the phone number to call with the message. You can enter multiple phone numbers, separated by a comma. There is a 2,000 character limit in this field. Also, non-numeric characters such as "-" and "." are ignored.
   - **Message**. Enter a text message plus any desired percent variable codes. Keep in mind that if you use percent variables, this will greatly increase the character count.

> **Note**: If the message exceeds 140 characters, the message will be broken into up to 3 parts and will be sent as separate messages ("1 of 3", "1 of 2", etc.).

   - **Tip**: Click **Mobile Device Status** to insert a link to the device status in the message.

5. Click **Save**. The SMS action appears in the Actions list.

Adding an SMS Direct action

SMS Direct messages are similar to SMS messages, except a phone line is not required. Instead, messages are sent directly to a cell phone, or other texting capable device, via a GSM modem. If the receiving phone is not active or is out of range when a SMS message is sent, messages are received when the phone is turned on. SMS messages are listed in the WhatsUp Gold Action log.

You need the following items to use the SMS Direct Action:

- GSM modem to connect to the WhatsUp machine
- SIM card for the GSM modem
- Cell service/signal in the room in which the WhatsUp machine and GSM modem reside

To add a new SMS Direct action:

1 From the WhatsUp Gold web interface, go to **APM > Actions,** then click **Actions** in the Actions Management tree. The Actions page appears.

2 Click **Add Action**. The Edit Action page appears.

3 Select **SMS Direct** from the **Action type** list. The boxes for the SMS Direct action appear.

4 Enter or select the appropriate information:

- **Name**. Enter a unique name for the action. This name displays in the Action Library.
- **Description**. (Optional) Enter additional information about the action. This description displays next to the action in the Action Library.
- **Phone number**. Enter the cell phone number(s) of the intended SMS message recipients.

Note: All non-numeric characters such as "-" and ".", are ignored.

Note: There is a 2,000 character limit in this box.

- **COM Port**. Select the COM port you want to use with this notification.

Note: The list displays all ports associated with the GSM modem, including virtual and hard-wired, serial ports. You must select the port that is assigned to the modem in the Windows Device Manager.

- **Message**. Enter a text message, plus any desired percent variable codes. Using percent variables greatly increases character count.

Note: If the message exceeds 140 characters, the message may be broken into up to three parts and is sent as separate messages ("1 of 3", "1 of 2", etc.), each message containing up to 140 characters, for a total of up to 420 characters. Spaces are included in the character count.

5 Click **Save**. The SMS Direct action appears in the Actions list.

Adding an SSH action

The SSH action connects to remote devices via SSH to execute commands or scripts.

To add a new SSH action:

1 From the WhatsUp Gold web interface, go to **APM > Actions,** then click **Actions** in the Actions Management tree. The Actions page appears.

2 Click **Add Action**. The Edit Action page appears.

3 Select **SSH** from the **Action type** list. The boxes for the SSH action appear.

4 Enter or select the appropriate information:

§ **Name**. Enter a unique name for the action. This name displays in the Action Library.

§ **Description**. (Optional) Enter additional information about the action. This description displays next to the action in the Action Library.

§ **IP address**. Enter the IP address of the device to which you want to connect using SSH.

> **Note**: You can enter `%Device.Address` into the **IP Address** field; however, an SSH action that does not specify a specific IP address in this field is not available in the Recurring Actions wizard.

§ **Command to run**. Enter the command to be run and executed on the remote device. This command can be anything that the device can interpret and run; for example, a Unix shell command or a perl script.

> **Note**: If you create a script to run on the remote device, the script must be developed, tested, and/or debugged on the remote machine. WhatsUp Gold does not support manipulation of the remote script.

§ **SSH credential**. Select the appropriate SSH credential that WhatsUp Gold uses to connect to the remote device. If you select Use the device SSH credential, WhatsUp Gold uses the SSH credential assigned to the device for which the IP address is listed above. If the appropriate SSH credential is not listed, or the device has no SSH credentials assigned, browse (...) to the WhatsUp Gold Credentials Library to configure a set of credentials.

5 Click **Save**. The SSH action is added to the Actions list.

Adding a Syslog action

When a device does not respond to polling, you can send a Syslog message to a host that is running a Syslog server.

To add a new Syslog action:

1 From the WhatsUp Gold web interface, go to **APM > Actions,** then click **Actions** in the Actions Management tree. The Actions page appears.

2 Click **Add Action**. The Edit Action page appears.

3 Select **Syslog** from the **Action type** list. The boxes for the Syslog action appear.

4 Enter or select the appropriate information:

§ **Name**. Enter a unique name for the action. This name displays in the Action Library.

§ **Description**. (Optional) Enter additional information about the action. This description displays next to the action in the Action Library.

- **Syslog Server**. Enter the IP address or hostname of the machine that is running the Syslog server.
- **Port**. Enter the UDP port that the Syslog listener is listening on. The default port is 514.
- **Message**. Enter a text message to send to the Syslog server. This message may include notification variables. The Syslog message box limits input to 511 characters. If notification variables are used, then the message that actually gets sent is limited to 1023 bytes, in order to comply with the Syslog protocol. Non-visible ASCII characters such as tabs and line feeds are replaced by space characters.

5 Click **Save**. The Syslog action is added to the Actions list.

Adding a VMware action

VMWare actions perform operations such as starting, stopping, or taking a snapshot of virtual machines running on a VMware host or being managed by a VMware vCenter server.

To add a new VMware action:

1. From the WhatsUp Gold web interface, go to **APM > Actions,** then click **Actions** in the Actions Management tree. The Actions page appears.
2. Click **Add Action**. The Edit Action page appears.
3. Select **VMware** from the **Action type** list. The boxes for the VMware action appear.
4. Enter or select the appropriate information:
   - **Name**. Enter a unique name for the action. This name displays in the Action Library.
   - **Description**. (Optional) Enter additional information about the action. This description displays next to the action in the Action Library.
   - **VMware server IP address**. Enter the IP address of the VMware host or vCenter server managing the virtual machine.
   - **VMware credentials**. Select the VMware credentials from the Credentials Library for the VMware host or vCenter server managing the virtual machine. Click browse (**...**) to manage credentials in the credentials library.
   - **VMware name**. Select the Virtual machine VMware name for the virtual machine on which you want the action performed. You can enter the VMware name, or select from the list of virtual machines associated with the VMware host or vCenter server. Click browse (**...**) to access the list of virtual machines associated with the VMware host.
   - **Operation**. Select the operation you want the action to perform from the list.

     The following operations can be performed on a virtual machine:

     - **Power On**. Powers up the virtual machine and boots the guest operating system if the guest operating system is installed.
     - **Power Off**. Powers down the virtual machine. The virtual machine does not attempt to gracefully shut down the guest operating system.
     - **Reset**. Powers down the virtual machine and restarts it.
     - **Shutdown**. Shuts down the guest operating system. If the guest operating system automatically powers off its host, then the virtual machine also powers off.
     - **Suspend**. Pauses the virtual machine activity; all transactions are frozen.

  - **Restart**. Shuts down and restarts the guest operating system; does not power off the virtual machine.
- **Take snapshot**. Saves the current state of the virtual machine to the virtual disk of the guest system.

5 Click **Save**. The VMware action is added to the Actions list.

Percent variables for APM actions

The following percent variables are available for use with Application Performance Monitoring (APM) actions:

Name	Description
%System.Time	Returns the system time.
%System.Date	Returns the system date.
%System.InstallDir	Returns the install directory of the WhatsUp Gold instance.
%Application.ApplicationInstance.ApplicationID	Returns the ID of the application instance.
%Application.ApplicationInstance.ApplicationName	Returns the application name associated with the application instance.
%Application.ApplicationInstance.Description	Returns the description given to the application instance.
%Application.ApplicationInstance.CurrentState	Returns the current state of the application instance.
%Application.ApplicationInstance.PreviousState	Returns the previous state of the application instance.
%Application.ApplicationInstance.MasterDeviceID	Returns the ID of the master device associated with the application instance.
%Application.ApplicationInstance.MasterDeviceDisplayName	Returns the display name of the master device associated with the application instance.
%Application.TriggeringComponent.Name	Returns the name of the component that triggered the associated action.
%Application.TriggeringComponent.PollTime	Returns the time of the last poll of the component that triggered the action.
%Application.TriggeringComponent.Type	Returns the type of the component that triggered the action.
%Application.TriggeringComponent.CurrentState	Returns the current state of the component that triggered the action.
%Application.TriggeringComponent.PreviousState	Returns the previous state of the component that triggered the action.
%Application.TriggeringComponent.DeviceID	Returns the ID of the device associated with the component that triggered the action.

%Application.TriggeringComponent.DeviceDisplayName	Returns the display name of the device associated with the component that triggered the action.
%Device.DatabaseID	Returns the database of the device associated with the component that triggered the action.
%Device.DisplayName	Returns the display name of the device associated with the component that triggered the action.
%Device.HostName	Returns the host name of the device associated with the component that triggered the action.
%Device.Address	Returns the IP address of the device associated with the component that triggered the action.

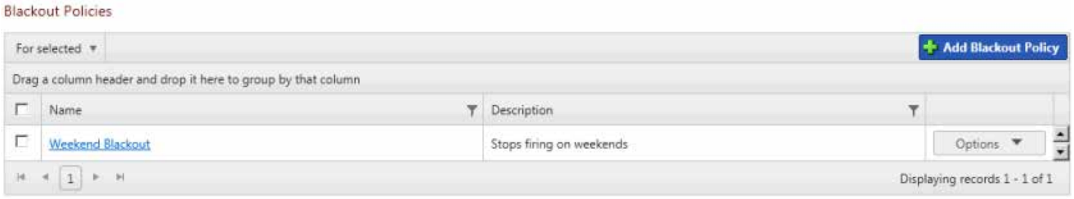
Note: If the source is an *application instance or a group instance* then the value of the `Device.DatabaseID` percent variable is the ID of the master device assigned to the application/group instance. If the source is a *component instance,* then the value of the `Device.DatabaseID` percent variable is the ID of the device assigned (overridden) to the component instance. If no device is assigned to the component instance, then the value of the `Device.DatabaseID` percent variable is the ID of the master device assigned to the application instance. Value of all other device specific percent variables will reflect the properties of the device referenced by `Device.DatabaseID`.

Important: If the `%Application.TriggeringComponent.DeviceDisplayName` variable is used in an action it will return a "0" if it evaluates against the master device. If it evaluates against an overriden device component, it returns the proper device display name.

Working with blackout policies in APM

Application Performance Monitoring (APM) blackout policies allow you to designate specific days of the week and times that APM does not alert you on the health of the components monitored with APM. For example, you may not want to receive alerts on the weekend. To do this, create a blackout policy that includes blackout times from 12:00AM Saturday to 12:00AM Monday.

To access APM blackout policies in the WhatsUp Gold web interface, go to **APM > Actions Management > Blackout Policies**.


Blackout Policies

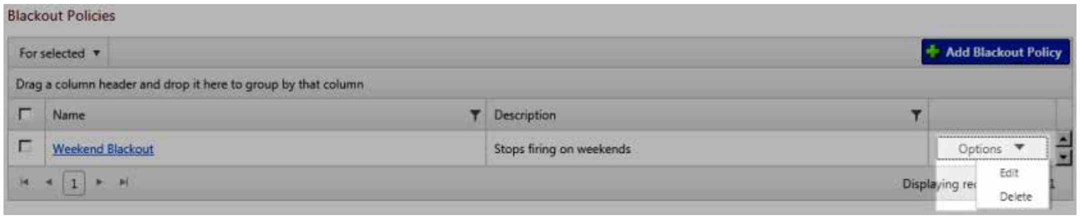
For selected ▾
Add Blackout Policy
Drag a column header and drop it here to group by that column

□	Name	Description	
□	Weekend Blackout	Stops firing on weekends	Options ▾

1
Displaying records 1 - 1 of 1

Use the APM Blackout Policies page to configure new or existing policies.

- Click **New** to *configure a new blackout policy* (on page 131).
- Select a blackout policy, then click **Edit** to modify its configuration.



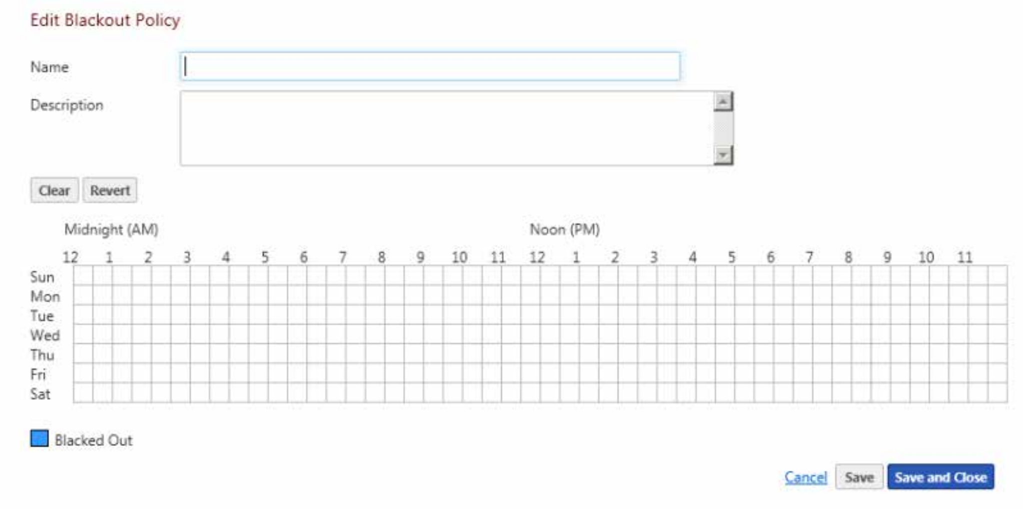
Name	Description
Weekend Blackout	Stops firing on weekends

- Select a blackout policy, then click **Delete** to remove it from the library.

Creating a blackout policy in APM

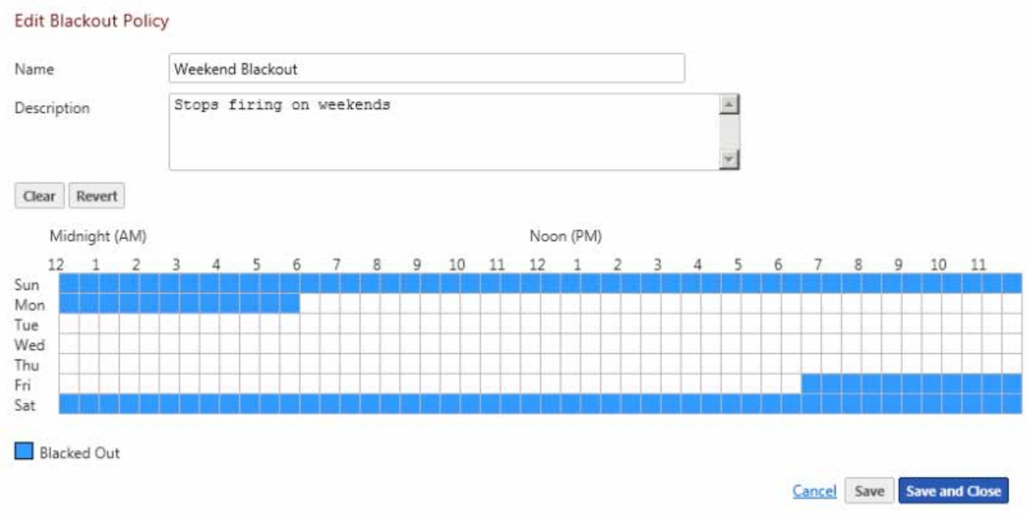
To schedule a new blackout policy in APM:

1. From the WhatsUp Gold web interface, go to **APM > Actions Management > Blackout Policies**. The Blackout Policies page appears.
2. Click **Add Blackout Policy**. The Edit Blackout Policy page appears.



3. Enter the appropriate information:
   - **Name**. Enter a unique name for the blackout policy.
   - **Description**. Enter additional information about the blackout policy.

4 Click and drag to select the blackout periods you want to create.



Edit Blackout Policy

Name: Weekend Blackout

Description: Stops firing on weekends

	Midnight (AM)												Noon (PM)											
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
Sun	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Mon	■	■	■	■	■	■																		
Tue																								
Wed																								
Thu																								
Fri																					■	■	■	■	■
Sat	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

■ Blacked Out

5 Click **Save** or **Save and Close**. The blackout policy is added to the Blackout Policies list.

Working with application states

Applications within WhatsUp Gold can have the following states:

§ **Up**. The Up state indicates that all of the monitored components, critical component groups and applications that are defined in the application instance are up.

§ **Down**. The Down state indicates that one or more of an application's critical components, component groups or applications has exceeded its down threshold.

§ **Warning**. The Warning state indicates that one or more non-critical component or application has entered the down state.

§ **Unknown**. The Unknown state indicates that the state of the component or application cannot be determined.

§ **Maintenance**. The Maintenance state indicates that one or more component or application has been placed into a Maintenance state.

Note: Components marked as critical cause the application to go into a Down state if the component is out of threshold. Non-critical components cause the application to go into a Warning state, unless all components are down, in which case the application goes into the Down state.

Note: Groups are always evaluated as critical.

The following thresholds are monitored on an application level:

§ CPU Utilization

§ Database Query

§ Disk Utilization

- Memory Utilization
- Network Port Check
- Process Check
- Script Execution
- SNMP
- SSH Command
- Windows Service Check
- WMI

APM Actions Log

The APM Actions log provides information about the actions that are executed in response to the state change of a source. You can set the time range for the actions you want to see in the Action Log. You can group and filter the log, as well as export the log to a comma separated list. The Action log provides the following fields:

- **Action**. The name of the triggered action.
- **Action Policy**. The name of the action policy that triggered the action.
- **Source**. The instance or component whose state change triggered the action.
- **Indicator**. A visual indication of the state.
- **State**. The state to which the source transitioned when the action occured.
- **Activity**.
- **Details**. Details about the action.
- **Log Date**. The date and time at which the action occurred.

To set the date and time range:

1. Set the Start date.
   a) Select the calendar icon. The calendar appears.
   b) Choose the start date. The date appears in the **Start Date** box.
2. Set the Start time.
   a) Select the watch icon. The time list appears.
   b) Select the start time. The time appears in the **Start Date** box.
3. Set the End date.
   a) Select the calendar icon. The calendar appears.
   b) Choose the end date. The date appears in the **End Date** box.
4. Set the End time.
   a) Select the watch icon. The time list appears.
   b) Select the end time. The time appears in the **End Date** box.
5. Click **Apply**. The actions for the selected time range are loaded into the Action Log.

CHAPTER 5

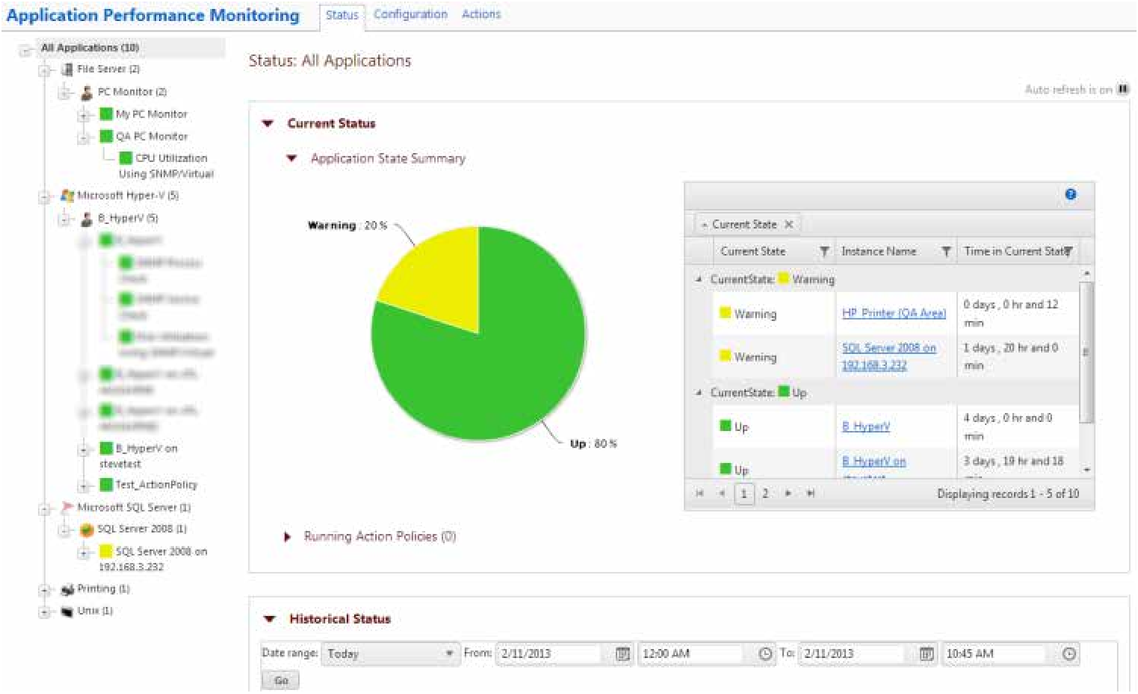
Application Performance Monitoring status

In This Chapter

Viewing application performance status

The Application Performance Monitoring Status page allows you to view the performance status for the applications you are currently monitoring with Application Performance Monitoring.

To access the Application Performance Monitoring Status page, go to **APM > Status**.



All Applications (10)
- File Server (2)
  - PC Monitor (2)
    - 🟩 My PC Monitor
    - 🟩 QA PC Monitor
      - 🟩 CPU Utilization Using SNMP/Virtual
- Microsoft Hyper-V (5)
  - B_HyperV (5)
    - [redacted]
    - 🟩 B_HyperV on stevetest
    - 🟩 Test_ActionPolicy
- Microsoft SQL Server (1)
  - SQL Server 2008 (1)
    - 🟨 SQL Server 2008 on 192.168.3.232
- Printing (1)
- Unix (1)

Status: All Applications

Auto refresh is on

Current Status

Application State Summary

Current State

Current State	Instance Name	Time in Current State
CurrentState: 🟨 Warning		
🟨 Warning	HP Printer (QA Area)	0 days , 0 hr and 12 min
🟨 Warning	SQL Server 2008 on 192.168.3.232	1 days , 20 hr and 0 min
CurrentState: 🟩 Up		
🟩 Up	B_HyperV	4 days , 0 hr and 0 min
🟩 Up	B_HyperV on stevetest	3 days , 19 hr and 18 min

1 2

Displaying records 1 - 5 of 10

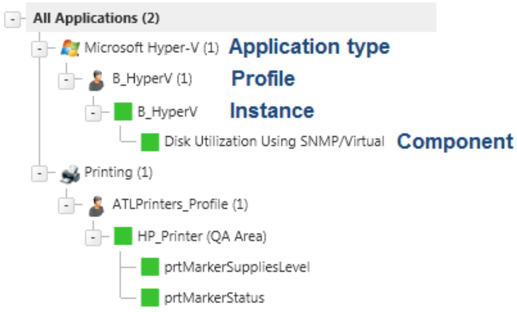
Running Action Policies (0)

Historical Status

Date range: Today From: 2/11/2013 12:00 AM To: 2/11/2013 10:45 AM

Go

On the left of the Status page, the Application tree provides a way to determine the scope of the data provided in the right-hand content pane, as well as to provide the status of instances and components. The tree has a root that provides information on All Applications monitored by Application Performance Monitoring. Below this root, there are four levels:

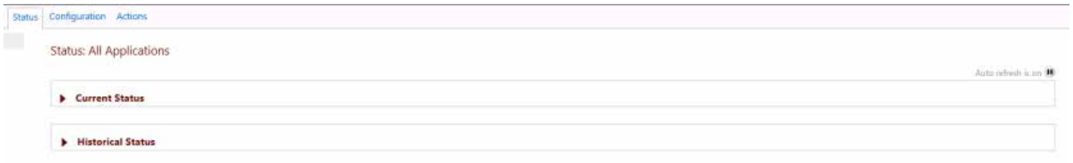


- **Application Type**. Groups application profiles, instances, and components by the type of application (e.g. SQL Server, IIS, Windows 2008 Server).
- **Profile**. Groups the instances and components by the profile used to create the individual instance. Where the data points being monitored are different between two versions of the same application, there may be separate application profiles for each version.
- **Instance**. Groups the components used to monitor the individual data points described in the profile.
- **Component**. Details each component used to monitor the data points associated with the application instance.

The status of the instance or component is displayed in the Application tree. The following table describes the icons used to display status:

Icon	Status
🟩 Up	Indicates that the instance or component is in the Up state.
🟥 Down	Indicates that the instance or component is in the Down state. A component is in a Down state if it has exceeded the Down threshold set in the application profile. An instance is in a Down state if one or more critical component or critical component group is in a Down state.
🟨 Warning	Indicates that the instance or component is in the Warning state. A component is in a Warning state if it has exceeded the Warning threshold set in the application profile. An instance is in a Warning state if one or more components or component groups are in a Warning state.
🟦 Maintenance	Indicates that the instance or component is in an Maintenance state.
▨	Indicates that the component has been disabled.
⬜ Unknown	Indicates that the instance or component is in Unknown state.

There are two collapsible sections that make up the content pane of the status page.



Status: All Applications

▸ Current Status

▸ Historical Status

The top section, **Current Status**, provides summary information about applications or components and a list of the running Action Policies. The bottom section, **Historical Status**, provides a view into the availability, state change, instance and component summary information, as well as actions and resolved items over a defined time period.

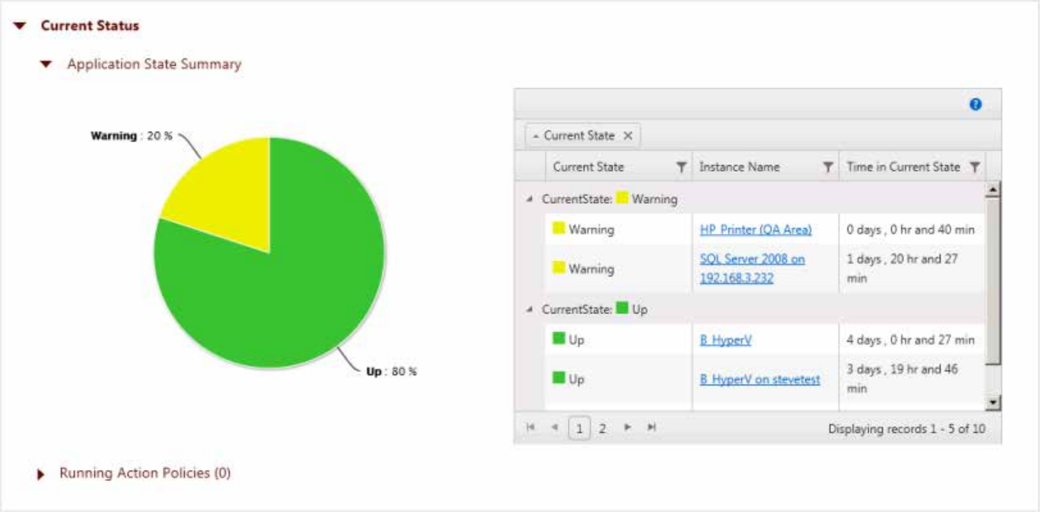
> **Tip**: Click the arrows to the left of a section name to expand or collapse the information in that section.

Please note that any reporting and log activity for any application profile or profile type selected on the APM Status page includes data for all components and groups under your selection in the navigation tree. This functionality can be limited to improve performance by accessing the *APM Application Settings* (on page 155) and clearing the **Component and group data** check box.

For flow charts and step-by-step information about configuring APM, see *Getting Started with APM* (on page 3).

Viewing application status details

The **Current Status** section of the status page provides information about the current state (Up, Down, Warning, Maintenance, or Unknown) of monitored applications and components as well as the running action policies. The information in this section is based on any information provided by Application Performance Monitoring during the latest poll of the components making up the instance or instances within the selected scope.



Current Status

Application State Summary

- Current State ×

Current State	Instance Name	Time in Current State
CurrentState: 🟨 Warning		
🟨 Warning	HP Printer (QA Area)	0 days , 0 hr and 40 min
🟨 Warning	SQL Server 2008 on 192.168.3.232	1 days , 20 hr and 27 min
CurrentState: 🟩 Up		
🟩 Up	B HyperV	4 days , 0 hr and 27 min
🟩 Up	B HyperV on stevetest	3 days , 19 hr and 46 min

1 2 Displaying records 1 - 5 of 10

Running Action Policies (0)

The reports available in the Current Status section are listed below:

§ **Application State Summary**. Provides a pie-chart of the percentage of the instances of the selected application or application type that are in a particular state (Up, Down, Warning, Maintenance, or Unknown), and a grid with each instance in the selected application grouping, its current state, and amount of time the instance has been in that state.

§ **Component State Summary**. Provides a pie-chart of the percentage of the components in the selected instance have been in a particular state (Up, Down, Warning, Maintenance, or Unknown) and a grid with each component, its current state, and amount of time the component has been in that state.

Tip: Click a section of the pie chart representing an individual state to view only items in that state in the grid.

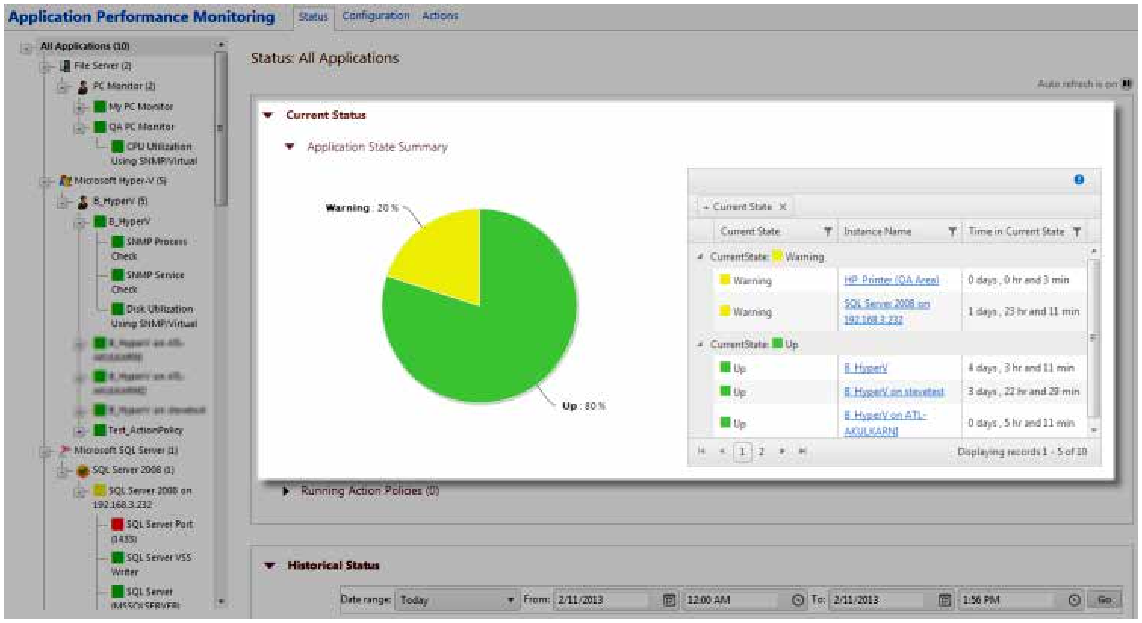
§ **Running Action Policies**. Provides a list of all of the action policies that have been configured and assigned to an instance or component.

The following table describes which reports are available in the **Current Status** section based on the scope selected in the application tree:

	Application State Summary	Component State Summary	Running Action Policies
All Applications	YES	NO	YES
Application Type	YES	NO	YES
Profile	NO	YES	YES
Instance	NO	YES	YES
Component	NO	NO	YES

Application State Summary

The Application State Summary, on the **Status** tab, provides a summary of the current states of the applications and instances monitored by Application Performance Monitoring.



Current State	Instance Name	Time in Current State
CurrentState: 🟨 Warning		
🟨 Warning	HP Printer (QA Area)	0 days , 0 hr and 3 min
🟨 Warning	SQL Server 2008 on 192.168.3.232	1 days , 23 hr and 11 min
CurrentState: 🟩 Up		
🟩 Up	B_HyperV	4 days , 3 hr and 11 min
🟩 Up	B_HyperV on stevetest	3 days , 22 hr and 29 min
🟩 Up	B_HyperV on ATL-AKULKARNI	0 days , 5 hr and 11 min

Displaying records 1 - 5 of 10

There are two elements of the Application State Summary:

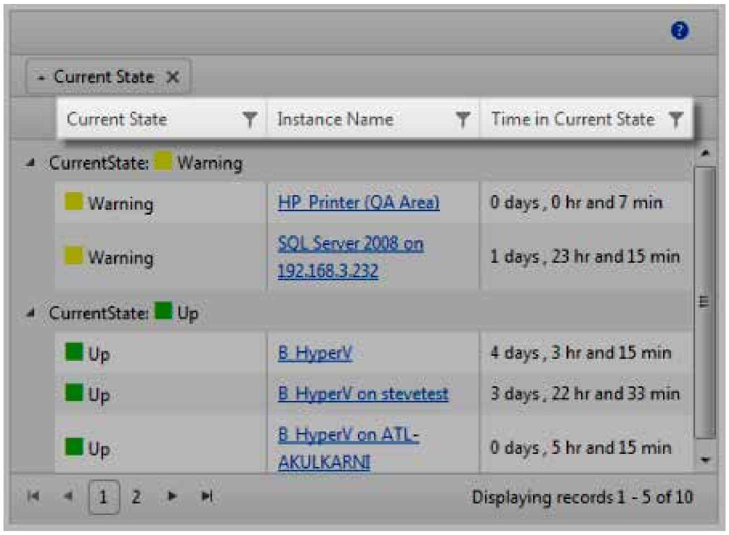
- **Current State chart** - a pie-chart of the percentage of the application instances or components that are currently in a particular state.

- **Current State grid** - a grid with each instance in the selected application grouping, its current state, and amount of time the instance has been in that state.

Based on the scope selected in the Application tree (Application type, Profile, or Instance), the pie-chart displays the percentage of the monitored instances or components that are in a given state. The following table details the value represented by the **Current State chart** for each level of the Application tree.

Scope	Displays:
All Applications	Percentage of all instances monitored by Application Performance Monitoring that are in a given state.
Application Type	Percentage of all instances of the selected application type that are in a given state.
Profile	Percentage of all instances created from the selected profile that are in a given state.
Instance	Component State Summary report is visible when Instance is selected.
Component	Not available.

The Current State grid shows the current state of all of the instances associated with the selected application, profile or instance.



Current State	Instance Name	Time in Current State
CurrentState: 🟨 Warning		
🟨 Warning	HP Printer (QA Area)	0 days , 0 hr and 7 min
🟨 Warning	SQL Server 2008 on 192.168.3.232	1 days , 23 hr and 15 min
CurrentState: 🟩 Up		
🟩 Up	B HyperV	4 days , 3 hr and 15 min
🟩 Up	B HyperV on stevetest	3 days , 22 hr and 33 min
🟩 Up	B HyperV on ATL-AKULKARNI	0 days , 5 hr and 15 min

Displaying records 1 - 5 of 10

- **Current State**. The current state (Up, Down, Warning, Maintenance, Disabled, or Unknown).
- **Instance Name**. The name of the instance.
- **Time in Current State**. The amount of time the instance has been in the current state.

Scope	Displays:
All Applications	Current state of all instances monitored by Application Performance Monitoring.
Application Type	Current state of all of the instances of the selected application type.
Profile	Current state of all instances created from the selected profile.
Instance	Component State Summary report is generated when Instance is selected.
Component	Not available.

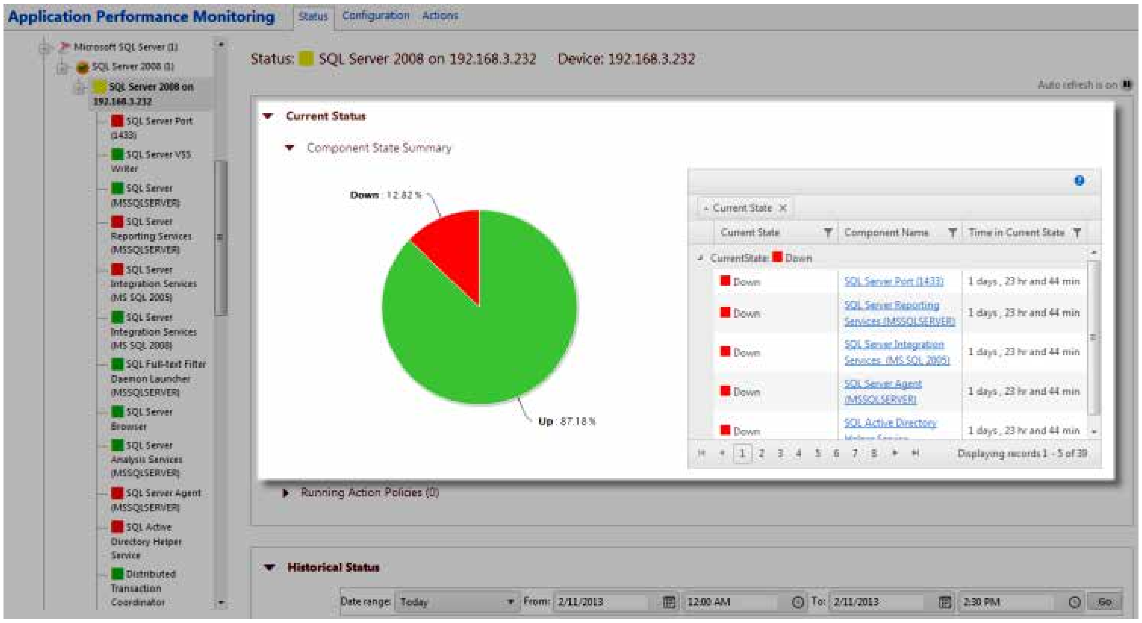
Grouping and filtering data

You can group the report by any column. To group the output by a column, drag a column header to the grid header. You can group by more than one criteria by dragging more than one column header to the grid header. The grid is ordered by all of the groupings appearing in the grid header, from left to right. To remove a grouping, close the grouping you want to remove. Click on the filter icon to create a filter on data displayed in the column.

Component State Summary

The Component State Summary, on the **Status** tab, provides a summary of the current states of the components monitored by Application Performance Monitoring, based on the component selected in the Application Tree.

There are two elements of the Component State Summary, the first is the Current State chart, a pie-chart of the percentage of the components that are currently in a particular state, and the second is the Current State grid, a grid with each component in the selected instance, its current state, and amount of time the component has been in that state.

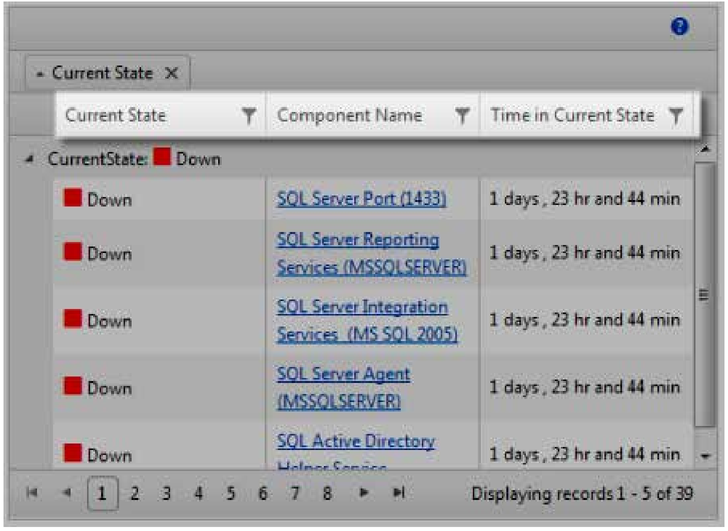


Application Performance Monitoring
Status
Configuration
Actions
Microsoft SQL Server (1)
SQL Server 2008 (1)
SQL Server 2008 on 192.168.3.232
SQL Server Port (1433)
SQL Server VSS Writer
SQL Server (MSSQLSERVER)
SQL Server Reporting Services (MSSQLSERVER)
SQL Server Integration Services (MS SQL 2005)
SQL Server Integration Services (MS SQL 2008)
SQL Full-text Filter Daemon Launcher (MSSQLSERVER)
SQL Server Browser
SQL Server Analysis Services (MSSQLSERVER)
SQL Server Agent (MSSQLSERVER)
SQL Active Directory Helper Service
Distributed Transaction Coordinator
Auto refresh is on
Current Status
Component State Summary
Down : 12.82 %
Up : 87.18 %
Running Action Policies (0)
Historical Status
Go

Status: 🟨 SQL Server 2008 on 192.168.3.232 Device: 192.168.3.232

Date range: Today From: 2/11/2013 12:00 AM To: 2/11/2013 2:30 PM

The Component Current State chart is a pie-chart that details the percentage of the components that are in a given state (Up, Down, Warning, Maintenance, Disabled, or Unknown). The following table details the value represented by the Current State chart.



Current State	Component Name	Time in Current State
CurrentState: 🟥 Down		
🟥 Down	SQL Server Port (1433)	1 days , 23 hr and 44 min
🟥 Down	SQL Server Reporting Services (MSSQLSERVER)	1 days , 23 hr and 44 min
🟥 Down	SQL Server Integration Services (MS SQL 2005)	1 days , 23 hr and 44 min
🟥 Down	SQL Server Agent (MSSQLSERVER)	1 days , 23 hr and 44 min
🟥 Down	SQL Active Directory Helper Service	1 days , 23 hr and 44 min

Displaying records 1 - 5 of 39

The Current State grid shows the current state of all of the components associated with the selected instance.

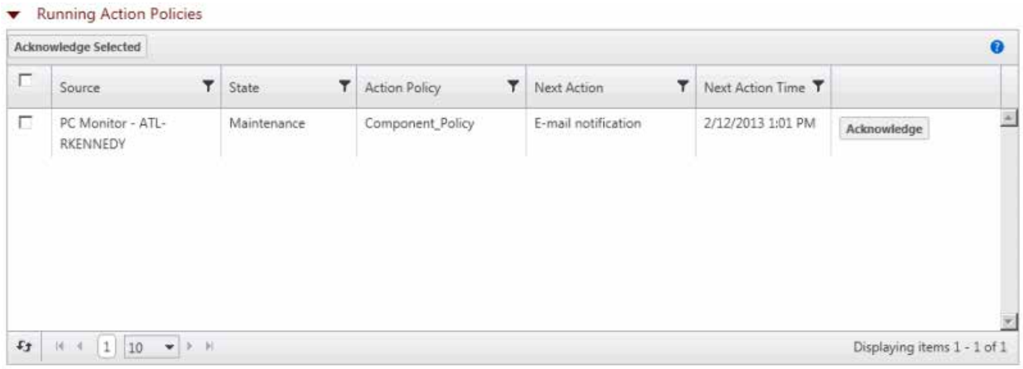
- **Current State**. The current state (Up, Down, Warning, Maintenance, Disabled, or Unknown).
- **Component Name**. The name of the component.
- **Time in Current State**. The amount of time the component has been in the current state.

Grouping and filtering data

You can group the Current State grid report by any column. To group the output by a column, drag a column header to the grid header. You can group for more than one criteria by dragging more than one column header to the grid header. The grid is ordered by all of the groupings appearing in the grid header, from left to right. To remove a grouping, close the grouping you want to remove. Click on the filter icon to create a filter on data displayed in the column.

Running Action Policies

The Running Action Policies report, on the **Status** tab, provides information about action policies where actions are currently being processed, or are pending processing by the action system. The report provides information about the instance or component to which the running action policy is applied, its current state, the most recent action fired as well as the next action to be fired. An action policy is running when an action is currently being processed, or when an action is pending.



Running Action Policies

Acknowledge Selected

□	Source	State	Action Policy	Next Action	Next Action Time	
□	PC Monitor - ATL-RKENNEDY	Maintenance	Component_Policy	E-mail notification	2/12/2013 1:01 PM	Acknowledge

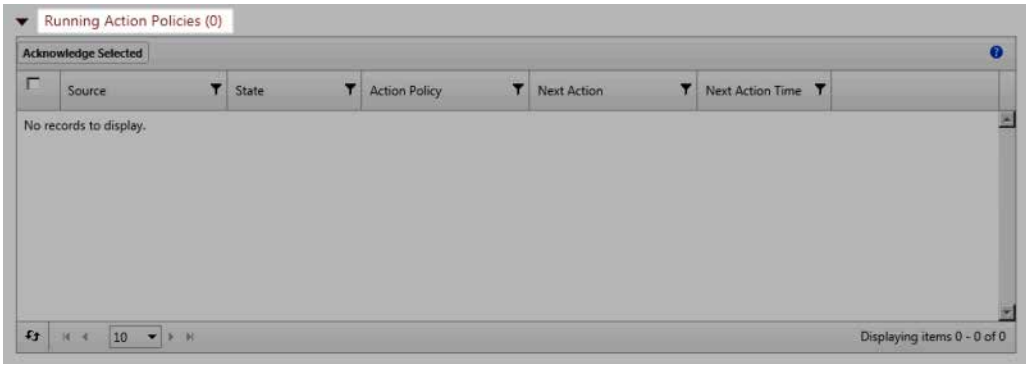
1 10 Displaying items 1 - 1 of 1

The following columns are available in the Running Action Policies report:

- **Source**. The instance or component which has met the criteria associated with the action
- **State**. The current state of the source (Up, Down, Warning, Maintenance, Disabled, or Unknown).
- **Action Policy**. The name of the Action Policy.
- **Most Recent Action**. The name of the last action that was fired by the Action Policy.
- **Next Action**. The next action in the action policy that is expected if the state of the source does not change.
- **Start Time**. The time that the initial action in the action policy fired.

Select a running policy, then click **Acknowledge** to acknowledge the event. Acknowledged policies are listed in the *Resolved Items Log* (on page 151).

If no policies are currently running, the number zero is displayed in parenthesis next to the report title.


Running Action Policies (0)

Acknowledge Selected

□	Source	State	Action Policy	Next Action	Next Action Time

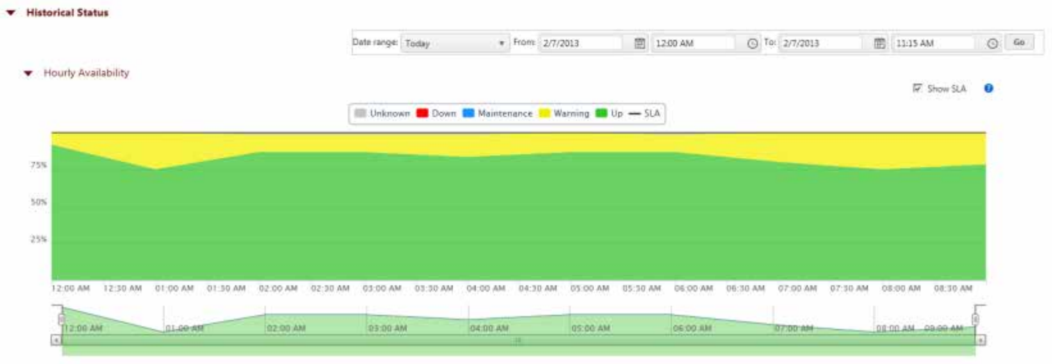
No records to display.

10

Displaying items 0 - 0 of 0

Viewing historical status

The **Historical Status** section of the status page provides data about the availability, state change, actions, and resolved items during a defined time period.


Historical Status

Date range: Today From: 2/7/2013 12:00 AM To: 2/7/2013 11:15 AM

Hourly Availability

☑ Show SLA

The reports available in the Historical Status section are listed below:

- **Hourly Availability**. Displays the percentage of the application instances or components that were in each state (Up, Down, Warning, Maintenance, Disabled, or Unknown) over the defined time period.
- **State Change**. Displays the state changes that the selected component underwent during the defined time period. This report is used for components that directly return their state when polled.
- **Polled Values**. Displays polled values from components that return values when polled. Application Performance Monitoring applies thresholds to these values to determine the states which are shown as state change markers.
- **Instance Summary**. Displays availability information about the instances associated with all applications, a specific application type or profile for the defined time period.

- **Component Information**. Displays current state, availability information for the defined time period, last polled value and threshold information used to determine the Warning and Down state for the selected component when Application Performance Monitoring manages the component's state based on values evaluated by thresholds defined in Application Performance Monitoring.
- **State Change Log**. Displays a chronological log of the changes in state for the instances in the selected application or profile, or the state of the components if a profile is selected, or the selected component.
- **Action Log**. Displays a chronological log of all actions that were fired within the defined time period.
- **Resolved Actions Log**. Displays a chronological log of the Action Policies that were acknowledged in the Running Action Policies report during the defined time period for all instances or components in the selected application, or profile; or for the selected component, when a single component is selected.

The following table describes which reports are available in the **Historical Status** section based on the scope selected in the application tree:

	Hourly Availability	**State Change**	**Instance Summary**	**Component Summary**	**Component Information**	**State Change Log**	**Action Log**	**Resolved Items Log**
All Applications	YES	NO	YES	NO	NO	YES	YES	YES
Application Type	YES	NO	YES	NO	NO	YES	YES	YES
Profile	YES	NO	YES	NO	NO	YES	YES	YES
Instance	YES	NO	NO	YES	NO	YES	YES	YES
Component	NO	YES	NO	NO	YES	YES	YES	YES

To set the date and time range:

1 Set the Start date.

a) Click the calendar icon 📅. The calendar appears.

b) Choose the start date. The date appears in the **Start Date** box.

2 Set the Start time.

a) Click the watch icon 🕒. The time list appears.

b) Select the start time. The time appears in the **Start Date** box.

3 Set the End date.

a) Click the calendar icon 📅. The calendar appears.

b) Choose the end date. The date appears in the **End Date** box.

4 Set the End time.

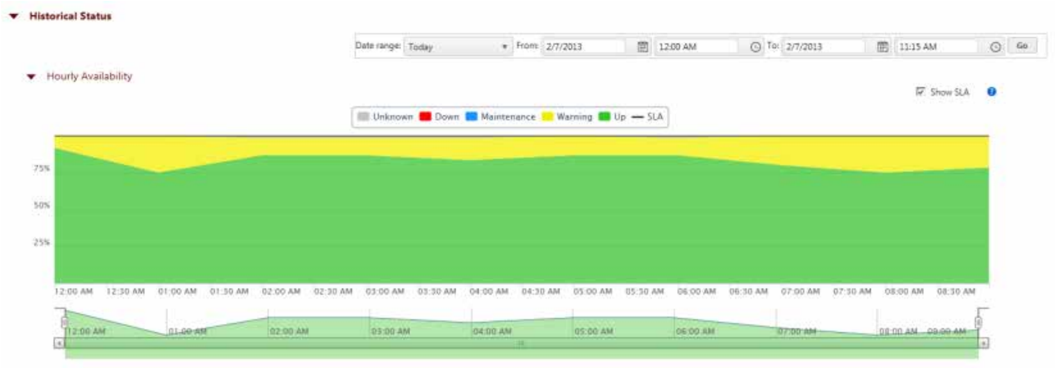
a) Click the watch icon 🕒. The time list appears.

b) Select the end time. The time appears in the **End Date** box.

5 Click **Apply**. The actions for the selected time range are loaded into the Action Log.

Hourly Availability

The Hourly Availability report displays the percentage of the application instances or components that were in each state (Up, Down, Warning, Maintenance, Disabled, or Unknown) over the defined time period. The scope of this report is defined by the scope you select. The following table describes the information that is displayed at each level in the Application Tree.



Date range: Today From: 2/7/2013 12:00 AM To: 2/7/2013 11:15 AM

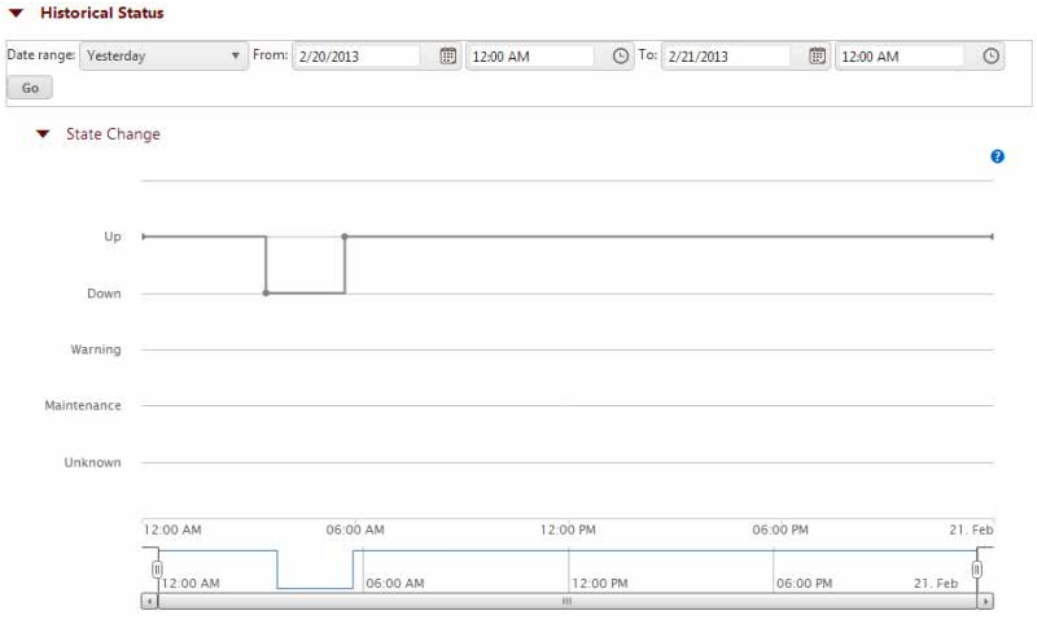
☑ Show SLA

Scope	**Displays:**
All Applications	Percentage of all instances monitored by APM that are in each state over the defined time period.
Application Type	Percentage of instances of the selected application type that are in a given state
Profile	Percentage of all instances created from the selected profile that are in a given state.
Instance	Component State Summary report is visible when Instance is selected.
Component	Not available.

Use the sliders located below the graph to zoom in on a particular time in the defined range.

State Change

The State Change report displays state changes that the selected component underwent during the defined time period. This report is used for components that directly return their state when polled. Use the sliders located below the graph to zoom in on a particular time in the defined range.

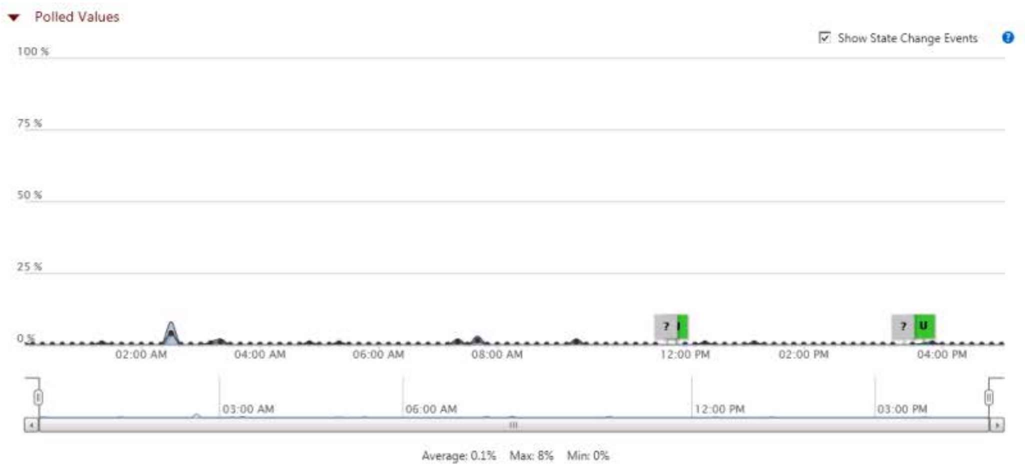


Historical Status

Date range: Yesterday From: 2/20/2013 12:00 AM To: 2/21/2013 12:00 AM

Polled Values

The Polled Values report is used to display data from components that return values when polled. These values are then evaluated using thresholds defined in Application Performance Monitoring which in turn determine the state. The report displays polled values, state change markers, as well as the average, maximum, and minimum values over the defined time period. Use the sliders located below the graph to zoom in on a particular time in the defined range.



Polled Values

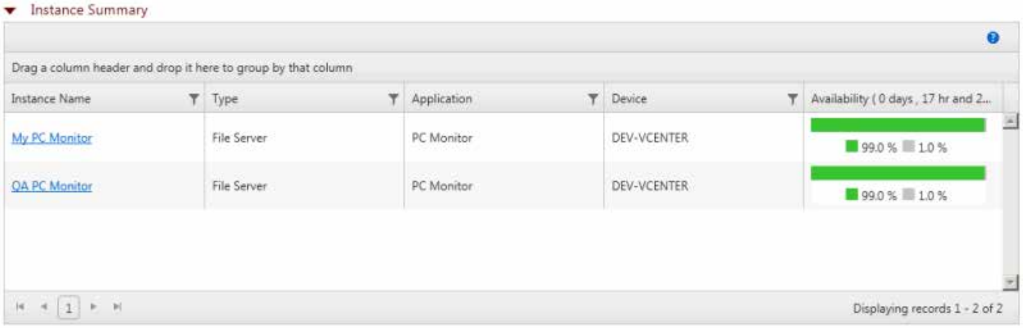
☑ Show State Change Events

Average: 0.1% Max: 8% Min: 0%

The State Change Log report is available for components that return a direct indication of their state when polled.

Instance Summary

The Instance Summary report displays availability information about the instances associated with all applications, a specific application type, or profile for the defined time period.



Instance Summary

Drag a column header and drop it here to group by that column

Instance Name	Type	Application	Device	Availability (0 days , 17 hr and 2...
My PC Monitor	File Server	PC Monitor	DEV-VCENTER	🟩 99.0 % ▨ 1.0 %
QA PC Monitor	File Server	PC Monitor	DEV-VCENTER	🟩 99.0 % ▨ 1.0 %

Displaying records 1 - 2 of 2

- § **Instance Name**. Displays the name of the instance.
- § **Type**. Displays the application type.
- § **Application**. Displays the application name.
- § **Device**. Displays the WhatsUp Gold device to which the instance is associated.
- § **Availability**. Displays percentage of time that the instance was in each state (Up, Down, Warning, Maintenance and Unknown) during the defined time period.
- § **Running Actions**. Displays the number of actions that were in a running state during the defined time period.

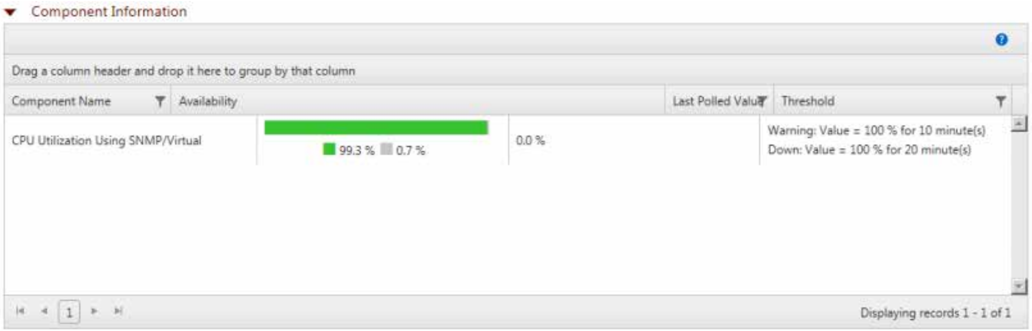
Grouping and filtering data

You can group the Instance Summary grid report by any column. To group the output by a column, drag a column header to the grid header. You can group by more than one criteria by dragging more than one column header to the grid header. The grid is ordered by all of the groupings appearing in the grid header, from left to right. To remove a grouping, close the grouping you want to remove.

You can also filter the Instance Summary grid report based on criteria defined using the filter icon ▼ in each column.

Component Summary

The Component Information report displays current state, availability information for the defined time period, last polled value and threshold information used to determine the Warning and Down state for the selected component when Application Performance Monitoring manages the component's state based on values evaluated by thresholds defined in Application Performance Monitoring.



Component Information

Drag a column header and drop it here to group by that column

Component Name	Availability	Last Polled Valu	Threshold
CPU Utilization Using SNMP/Virtual	🟩 99.3 % ▨ 0.7 %	0.0 %	Warning: Value = 100 % for 10 minute(s) Down: Value = 100 % for 20 minute(s)

1

Displaying records 1 - 1 of 1

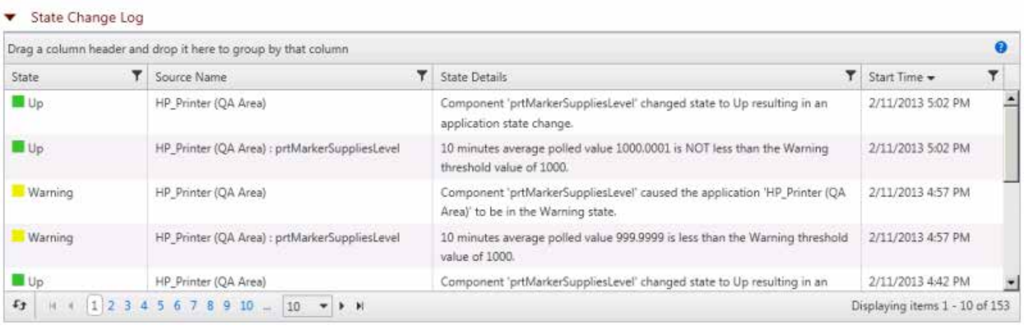
- § **Current State**. Displays the current state (Up, Down, Warning, Maintenance, Disabled, or Unknown) of the component.
- § **Component Name**. Displays the name of the component.
- § **Availability**. Displays percentage of time that the component was in each state (Up, Down, Warning, Maintenance and Unknown) during the defined time period.
- § **Last Polled Value**. Displays the last polled value. This is the current state for components that return state, and a value for those that return a value.
- § **Threshold**. Displays the Down and Warning threshold settings for components for which Application Performance Monitoring performs state evaluations.

Grouping and filtering data

You can group the Component Information grid report by any column. To group the output by a column, drag a column header to the grid header. You can group by more than one criteria by dragging more than one column header to the grid header. The grid is ordered by all of the groupings appearing in the grid header, from left to right. To remove a grouping, close the grouping you want to remove.

State Change Log

The State Change Log, displays a chronological log of the changes in state for the instances in the selected application, or profile; or for the selected component, when a single component is selected.



State Change Log

Drag a column header and drop it here to group by that column

State	Source Name	State Details	Start Time
🟩 Up	HP_Printer (QA Area)	Component 'prtMarkerSuppliesLevel' changed state to Up resulting in an application state change.	2/11/2013 5:02 PM
🟩 Up	HP_Printer (QA Area) : prtMarkerSuppliesLevel	10 minutes average polled value 1000.0001 is NOT less than the Warning threshold value of 1000.	2/11/2013 5:02 PM
🟨 Warning	HP_Printer (QA Area)	Component 'prtMarkerSuppliesLevel' caused the application 'HP_Printer (QA Area)' to be in the Warning state.	2/11/2013 4:57 PM
🟨 Warning	HP_Printer (QA Area) : prtMarkerSuppliesLevel	10 minutes average polled value 999.9999 is less than the Warning threshold value of 1000.	2/11/2013 4:57 PM
🟩 Up	HP_Printer (QA Area)	Component 'prtMarkerSuppliesLevel' changed state to Up resulting in an	2/11/2013 4:42 PM

Displaying items 1 - 10 of 153

- **State**. Displays the state (Up, Down, Warning, Maintenance, Disabled, or Unknown) to which the instance or component entered at the start time.
- **Source Name**. Displays the name of the instance or component.
- **State Details**. Displays details gathered about the state change.
- **Start Time**. Displays the time which the source entered the indicated state.

Grouping and filtering data

You can group the State Change Log by any column. To group the output by a column, drag a column header to the grid header. You can group by more than one criteria by dragging more than one column header to the grid header. The grid is ordered by all of the groupings appearing in the grid header, from left to right. To remove a grouping, close the grouping you want to remove.

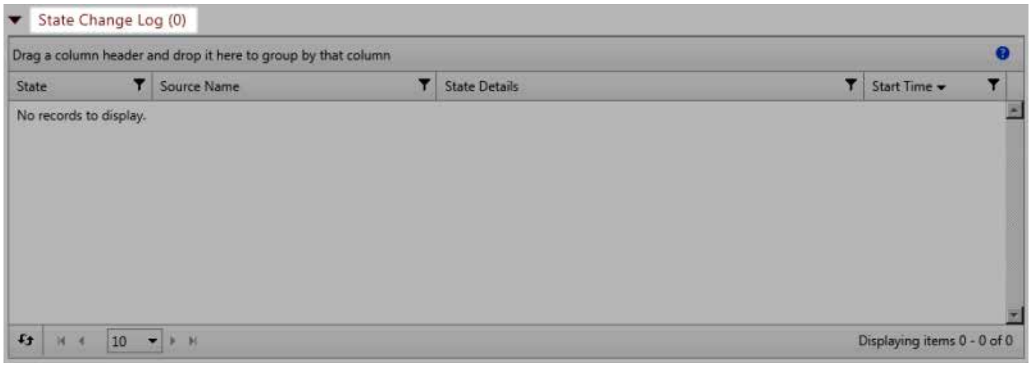
You can also filter the State Change Log based on criteria defined using the filter icon in each column.

The Polled Values report is used to display data from components that return values when polled to which Application Performance Monitoring applies thresholds to determine the state.

To filter the report:

1. Click the filter icon in the column containing the value on which you want to filter. The filter creation dialog appears.
2. Select the filter operation you want to use to create the filter criteria.
3. Enter the value you want the filter operation to use to create the filter criteria.
4. Click **Filter** to apply the filter to the entries in the report.

If no state changes have taken place, the number zero is displayed in parenthesis next to the report title.



State Change Log (0)

Drag a column header and drop it here to group by that column

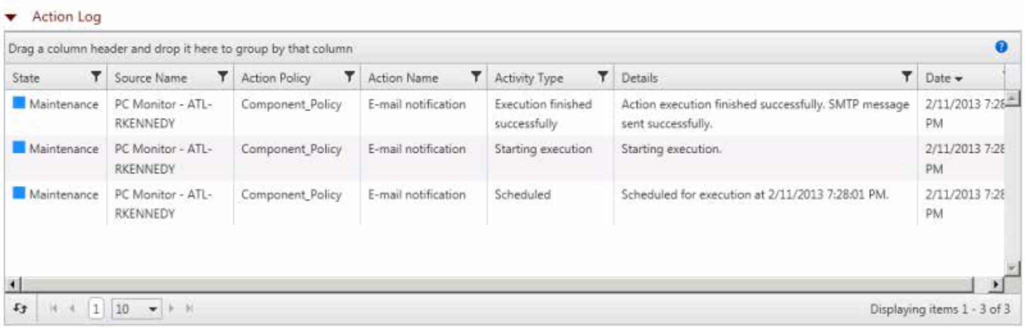
State	Source Name	State Details	Start Time
No records to display.			

10

Displaying items 0 - 0 of 0

Action Log

The Action Log displays a chronological log of the actions associated with all instances or components in the selected application, or profile; or for the selected component, when a single component is selected.



Action Log

Drag a column header and drop it here to group by that column

State	Source Name	Action Policy	Action Name	Activity Type	Details	Date
🟦 Maintenance	PC Monitor - ATL-RKENNEDY	Component_Policy	E-mail notification	Execution finished successfully	Action execution finished successfully. SMTP message sent successfully.	2/11/2013 7:28 PM
🟦 Maintenance	PC Monitor - ATL-RKENNEDY	Component_Policy	E-mail notification	Starting execution	Starting execution.	2/11/2013 7:28 PM
🟦 Maintenance	PC Monitor - ATL-RKENNEDY	Component_Policy	E-mail notification	Scheduled	Scheduled for execution at 2/11/2013 7:28:01 PM.	2/11/2013 7:28 PM

1 10

Displaying items 1 - 3 of 3

- **State**. Displays the state (Up, Down, Warning, Maintenance, Disabled, or Unknown) which the instance or component was in when the Action was executed.
- **Source Name**. Displays the name of the instance or component that triggered the action.
- **Action Policy**. Displays the name of the action policy which contains the action.
- **Action Name**. Displays the name of the action.
- **Activity Type**. Displays the activity type that describes the state of the action policy at the time of the state change.
- **Details**. Displays the details gathered by Application Performance Monitoring about the action.
- **Date**. Displays the date and time that the action was executed.

Grouping and filtering data

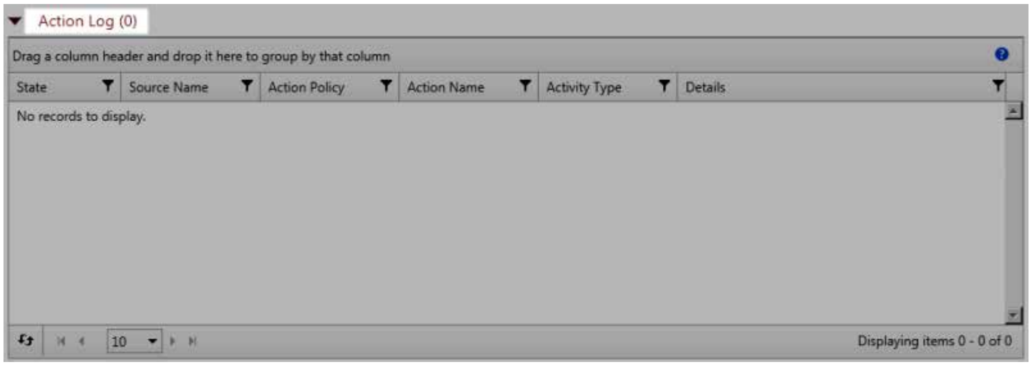
You can group the Action Log report by any column. To group the output by a column, drag a column header to the grid header. You can group by more than one criteria by dragging more than one column header to the grid header. The grid is ordered by all of the groupings appearing in the grid header, from left to right. To remove a grouping, close the grouping you want to remove.

You can also filter the Action Log report based on criteria defined using the filter icon in each column.

To filter the report:

1. Click the filter icon in the column containing the value on which you want to filter. The filter creation dialog appears.
2. Select the filter operation you want to use to create the filter criteria.
3. Enter the value you want the filter operation to use to create the filter criteria.
4. Click **Filter** to apply the filter to the entries in the report.

If no actions have been fired for policy, instance, or component, the number zero is displayed in parenthesis next to the report title.



Action Log (0)

Drag a column header and drop it here to group by that column

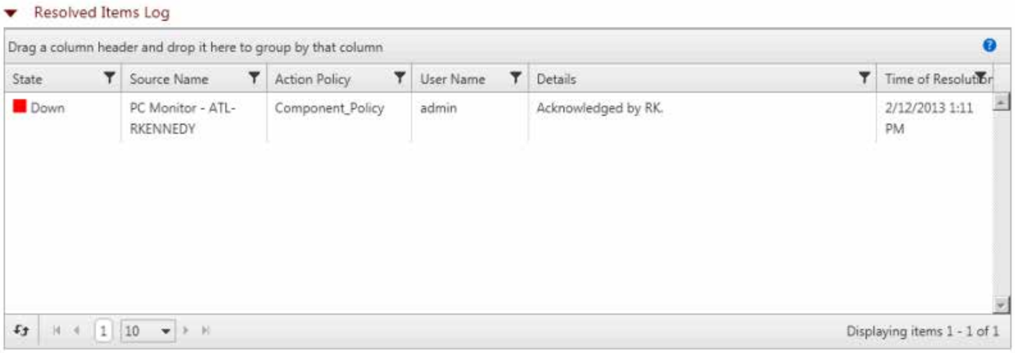
State	Source Name	Action Policy	Action Name	Activity Type	Details
No records to display.					

10

Displaying items 0 - 0 of 0

Resolved Actions Log

The Resolved Items Log displays a chronological log of the Action Policies that were acknowledged in the Running Action Policies report during the defined time period for all instances or components in the selected application, or profile; or for the selected component, when a single component is selected.



Resolved Items Log

Drag a column header and drop it here to group by that column

State	Source Name	Action Policy	User Name	Details	Time of Resolution
🟥 Down	PC Monitor - ATL-RKENNEDY	Component_Policy	admin	Acknowledged by RK.	2/12/2013 1:11 PM

1 10

Displaying items 1 - 1 of 1

- **State**. Displays the state (Up, Down, Warning, Maintenance, Disabled, or Unknown) which the instance or component was in when the Action Policy was Acknowledged.
- **Source Name**. Displays the name of the instance or component that triggered the action.
- **Action Policy**. Displays the name of the Action Policy which was Acknowledged in the Running Action Policies report.

- **User Name**. Displays the name of the user who acknowledged the Action Policy in the Running Action Policies report.
- **Details**. Displays the details entered by the user to describe the reason for Acknowledging the Action Policy.
- **Time of Resolution**. Displays the date and time that the user acknowledged the Action Policy.

Grouping and filtering data

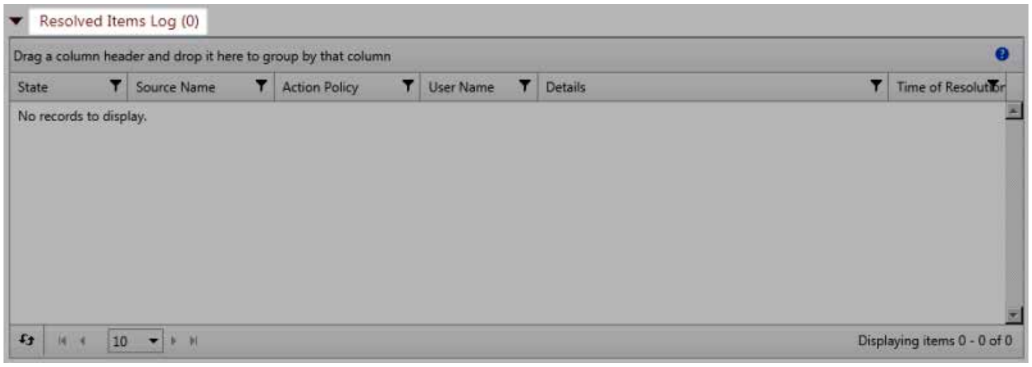
You can group the Resolved Items Log report by any column. To group the output by a column, drag a column header to the grid header. You can group by more than one criteria by dragging more than one column header to the grid header. The grid is ordered by all of the groupings appearing in the grid header, from left to right. To remove a grouping, close the grouping you want to remove.

You can also filter the Resolved Items log based on criteria defined using the filter icon to in each column.

To filter the report:

1. Click the filter icon in the column containing the value on which you want to filter. The filter creation dialog appears.
2. Select the filter operation you want to use to create the filter criteria.
3. Enter the value you want the filter operation to use to create the filter criteria.
4. Click **Filter** to apply the filter to the entries in the report.

If no policies that have run for the policy, instance, or component have been acknowledged, the number zero is displayed in parenthesis next to the report title.



Resolved Items Log (0)

Drag a column header and drop it here to group by that column

State	Source Name	Action Policy	User Name	Details	Time of Resolution
No records to display.					

10

Displaying items 0 - 0 of 0

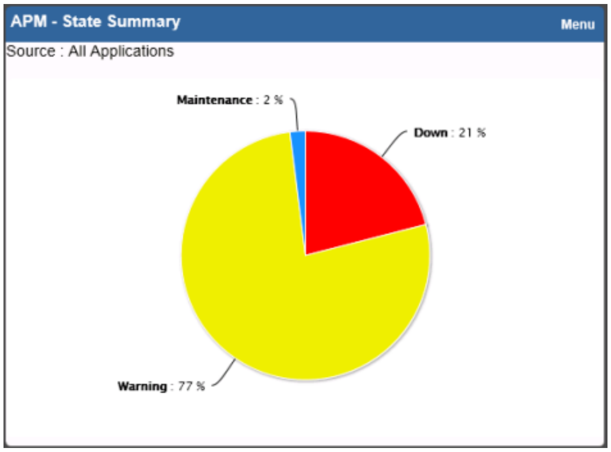
CHAPTER 6

APM Dashboard Reports

In This Chapter

About the APM: State Summary Dashboard Report

The State Summary dashboard report displays a pie chart depicting the application state of a selected application profile type, application profile, or application instance.



To configure the State Summary dashboard report:

1 From the State Summary dashboard report, click **Menu > Configure**. A Configure Menu dialog appears.

2 Click browse (**...**) to launch a dialog showing the APM navigation tree.

3 Select an application profile type, application profile, or application instance for display in the dashboard report.

Important: Summary data for any profile type, application profile, or application instance selected includes data for all components and groups under your selection in the navigation tree.

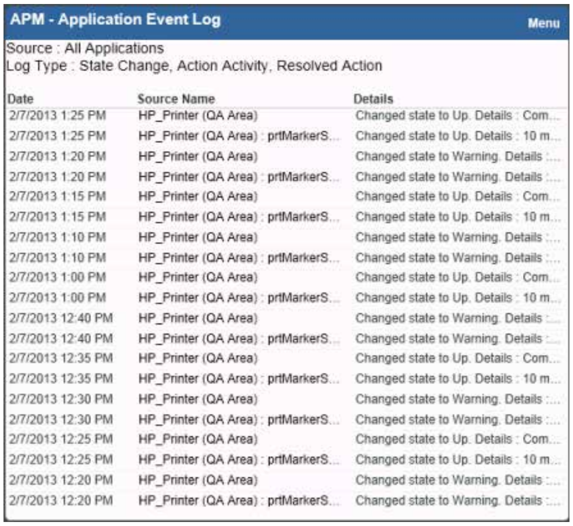
4 Click **OK**.

5 (Optional) Modify the **Report name**, **Width**, and/or **Height** of the dashboard report using the applicable boxes.

6 Click **OK**.

About the APM: Application Event Log Dashboard Report

The Application Event Log dashboard report displays state change, action activity and action resolution information for a selected application profile type, application profile, or application instance.



Source : All Applications
Log Type : State Change, Action Activity, Resolved Action

Date	Source Name	Details
2/7/2013 1:25 PM	HP_Printer (QA Area)	Changed state to Up. Details : Com...
2/7/2013 1:25 PM	HP_Printer (QA Area) : prtMarkerS...	Changed state to Up. Details : 10 m...
2/7/2013 1:20 PM	HP_Printer (QA Area)	Changed state to Warning. Details :...
2/7/2013 1:20 PM	HP_Printer (QA Area) : prtMarkerS...	Changed state to Warning. Details :...
2/7/2013 1:15 PM	HP_Printer (QA Area)	Changed state to Up. Details : Com...
2/7/2013 1:15 PM	HP_Printer (QA Area) : prtMarkerS...	Changed state to Up. Details : 10 m...
2/7/2013 1:10 PM	HP_Printer (QA Area)	Changed state to Warning. Details :...
2/7/2013 1:10 PM	HP_Printer (QA Area) : prtMarkerS...	Changed state to Warning. Details :...
2/7/2013 1:00 PM	HP_Printer (QA Area)	Changed state to Up. Details : Com...
2/7/2013 1:00 PM	HP_Printer (QA Area) : prtMarkerS...	Changed state to Up. Details : 10 m...
2/7/2013 12:40 PM	HP_Printer (QA Area)	Changed state to Warning. Details :...
2/7/2013 12:40 PM	HP_Printer (QA Area) : prtMarkerS...	Changed state to Warning. Details :...
2/7/2013 12:35 PM	HP_Printer (QA Area)	Changed state to Up. Details : Com...
2/7/2013 12:35 PM	HP_Printer (QA Area) : prtMarkerS...	Changed state to Up. Details : 10 m...
2/7/2013 12:30 PM	HP_Printer (QA Area)	Changed state to Warning. Details :...
2/7/2013 12:30 PM	HP_Printer (QA Area) : prtMarkerS...	Changed state to Warning. Details :...
2/7/2013 12:25 PM	HP_Printer (QA Area)	Changed state to Up. Details : Com...
2/7/2013 12:25 PM	HP_Printer (QA Area) : prtMarkerS...	Changed state to Up. Details : 10 m...
2/7/2013 12:20 PM	HP_Printer (QA Area)	Changed state to Warning. Details :...
2/7/2013 12:20 PM	HP_Printer (QA Area) : prtMarkerS...	Changed state to Warning. Details :...

To configure the Application Event Log dashboard report:

1. From the Application Event Log dashboard report, click **Menu > Configure**. A Configure Menu dialog appears.
2. Click browse (**...**) to launch a dialog showing the APM navigation tree.
3. Select an application profile type, application profile, or application instance for display in the dashboard report.

> ✓ **Important**: Summary data for any profile type, application profile, or application instance selected includes data for all components and groups under your selection in the navigation tree.

4. Click **OK**.
5. (Optional) Modify the **Report name**, **Select Max items**, **Width**, and/or **Height** of the dashboard report using the applicable boxes.
6. (Optional) Enable/Disable the **Event Log Types** to be displayed within the dashboard report by clicking the applicable check boxes. Options are **State Change**, **Action Activity**, and **Resolved Action**.
7. (Optional) Click the **Show Source Type Column** check box to display the source of the state change or action for your selection within the dashboard report.
8. Click **OK**.

CHAPTER 7

Application Performance Monitoring Application Settings

In This Chapter

Configuring APM application settings

The Application Performance Monitoring Application Settings page allows you to configure application states and set APM-specific data retention schedules.

To access Application Performance Monitoring Application Settings:

1. Click the Application Settings icon ⚙ in the upper-right corner of the page and click **Application Settings**. The Application Settings interface appears.
2. Click **Application Performance Management** under Application Settings.

You can configure APM to report certain application states as either Up or Down. These states are:

- Warning
- Maintenance
- Unknown

The default setting for all three is Up.

To modify how SLA-related reports are displayed:

1. Determine one or more reporting states you want to change.
2. Select **Up** or **Down** from the list to the right of each state.
3. Click **Save**. Applications in the applicable state are now reported as either Up or Down depending on your selection.

You can also configure APM to retain multiple data types for a specific duration. These data types are:

- Hourly
- Raw
- Action log
- Resolved Items log
- State change log

The default setting for all three is 90 days.

To modify data retention schedules:

1. Determine one or more data types for which you want to change the duration of retention.
2. Enter the number of days in the data entry boxes to the right of each applicable data type.
3. Click **Save**.

✓ **Important**: If the APM Application Settings **Component and group data** check box is selected, reporting and log activity for any application profile or profile type selected on the APM Status tab includes data for all components and groups under your selection in the navigation tree. Deselecting this check box increases performance of the APM Status page.

CHAPTER 8

Finding more information and updates

In This Chapter

For more information and updates

The following are information resources for Application Performance Monitoring. This information may be periodically updated and available on the WhatsUp Gold website.

§ **Release Notes**. The release notes provide an overview of changes, known issues, and bug fixes for the current release. The release notes are available on the *WhatsUp Gold web site* (http://www.whatsupgold.com/WUG161releasenotes).

§ **Application Help**. The console help contains dialog assistance, general configuration information, how-to's that explain how to use Application Performance Monitoring's features. The Table of Contents is organized by functional area, and can be accessed by clicking the Application Settings icon ⚙ in the upper-right corner of the page and clicking **Help**, and by clicking **Help** in Application Performance Monitoring dialogs.

§ **WUGSpace community**. WUGspace is an WhatsUp Gold IT community centered around valuable technical content for network engineers, IT managers, Architects, and System Administrators. Visit the community for additional product information and help, learn from other users, submit product ideas, and more. Visit the WhatsUp Gold forum on the *WUGspace community site* (http://www.whatsupgold.com/wugspace).

§ **Additional WhatsUp Gold resources**. For a list of current and previous guides and help available for WhatsUp Gold products, see the *WhatsUp Gold web site* (http://www.whatsupgold.com/support/guides.aspx).

§ **Licensing Information**. Licensing and support information is available on the *WhatsUp Customer Portal* (http://www.whatsupgold.com/wugCustPortal). The web portal provides enhanced web-based capabilities to view and manage Ipswitch product licenses.

§ **Technical Support**. Use the WhatsUp Gold Support Site for a variety of WhatsUp Gold product help resources. From here you can view product documentation, search Knowledge Base articles, access the community site for help from other users, and get other Technical Support information. The Support Site is available on the *WhatsUp Gold web site* (http://www.whatsupgold.com/support/index.aspx).

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This document was published on Thursday, February 28, 2013 at 08:27.