



# Qualys Cloud Platform (VM, PC) v10.x

## Release Notes

Version 10.10

April 29, 2021

This new release of the Qualys Cloud Platform (VM, PC) includes improvements to Vulnerability Management and Policy Compliance.

### **Qualys Policy Compliance (PC)**

[New Support for Azure MS SQL Authentication](#)

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### **Qualys Cloud Platform**

[Auto adjust during Daylight Saving Time option for Schedules](#)

**Qualys 10.10 brings you more improvements and updates! [Learn more](#)**

# Qualys Policy Compliance (PC/SCAP/SCA)

## New Support for Azure MS SQL Authentication

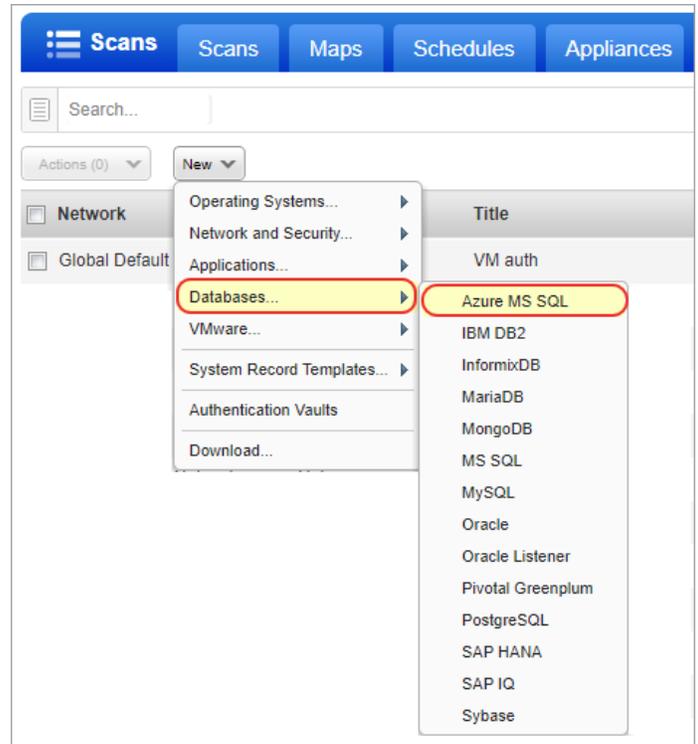
We now support AZURE MS SQL authentication for compliance scans using Qualys apps PC, SCA. Simply create an AZURE MS SQL authentication record with details about your credentials to authenticate to an AZURE MS SQL database instance running on a host, and scan it for compliance.

### How do I get started?

Go to Scans > Authentication, and choose New > Databases > Azure MS SQL Record (as shown on the right).

### Your Azure MS SQL authentication record

Each Azure MS SQL record identifies account login credentials, database information and target hosts (IPs). Provide basic login credentials (username and password) to be used for authentication or get the password from a supported password vault. Supported vaults are: Arcon PAM, Azure Key, BeyondTrust PBPS, CA Access Control, CyberArk AIM, CyberArk PIM Suite, HashiCorp, Liberman ERPM, Quest Vault, Thycotic Secret Server.



The screenshot shows the 'New Azure MS SQL Record' form. The form has a blue header with the title 'New Azure MS SQL Record' and a 'Launch Help' link. On the left side, there is a sidebar with a 'Record Title' section and a 'Login Credentials' section. The main content area is titled 'Login Credentials' and contains the following fields:

- Provider Name: Azure
- Authentication Type: Basic (dropdown menu)
- Username\*: joe@xyz.com (text input field)
- example: user@host.domain (small text below the username field)
- Password\*: (password input field)
- Confirm Password\*: (password input field)

Below the login credentials section is the 'Database Information' section, which contains the following fields:

- Instance\*: MSSQLSERVER
- Database\*: Azure MS SQL (dropdown menu) with an 'Auto discover' checkbox
- Port\*: 3456 (text input field)

At the bottom of the form, there are two buttons: 'Cancel' and 'Create'.

Tell us the database name to authenticate to and the port the database is running on. You can either enter the database name or select the Auto discover option. When you select Auto discover option we'll automatically find databases on your target hosts.

**Database Information**

Tell us the database instance(s) to authenticate to. You can define one instance (provide instance name, database name and port), or choose auto discover and let us find all matching instances - recommended if you have multiple instances on the same host.

Instance\*:

Database\*:   Auto discover

Port\*:

### Sample Reports

You'll see Azure Microsoft SQL Server 2014 instances in compliance scan results and reports.

Compliance Scan Results page 1

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**Appendix**

Target hosts found alive (IP)  
13.66.226.202, 40.78.240.8, 40.78.248.10

Target distribution across scanner appliances  
Aama-VM-NW1-04 : 13.66.226.202,40.78.240.8,40.78.248.10

Hosts Not Scanned

Azure MS SQL authentication was successful for these hosts

Azure MSSQL 2014 ( Port: 1433, Instance Name: MSSQLSERVER, Database Name: master, Database Username : )  
13.66.226.202, 40.78.240.8, 40.78.248.10

Azure MSSQL 2014 ( Port: 1433, Instance Name: MSSQLSERVER, Database Name: pgreendb, Database Username : )  
13.66.226.202, 40.78.240.8, 40.78.248.10

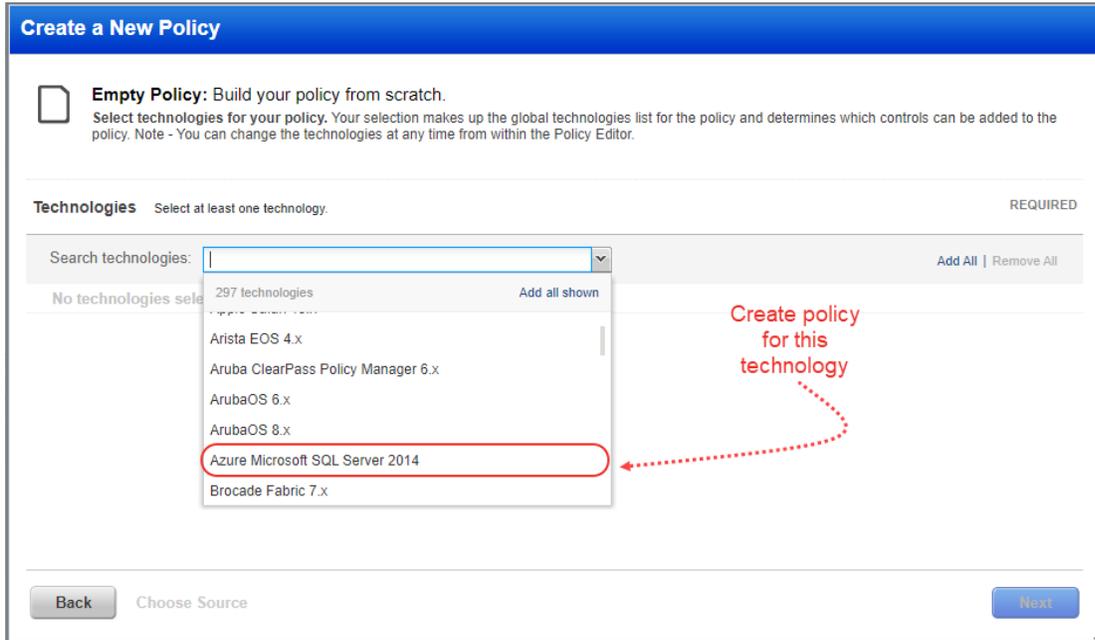
**Results**

Azure\_MS\_SQL 6 of 6 (100%)

MSSQL										
HOST	HOST TECHNOLOGY	INSTANCE	STATUS	CAUSE	OS	LAST AUTH	LAST SUCCESS	HOST ID	ALL ASSET TAGS	
13.66.226.202 (-, -)	Azure Microsoft SQL Server 2014	Port=1433, Instance Name=MSSQLSERVER, Database Name=master, Database Username=qw1@pc.azureserver1.database.windows.net	Passed	-	-	04/20/2021	04/20/2021	6863483	testBU3, Internet Facing Assets, AR_BU, Azure_M-S_SQL, Azure_host_tag, PreBU_All	

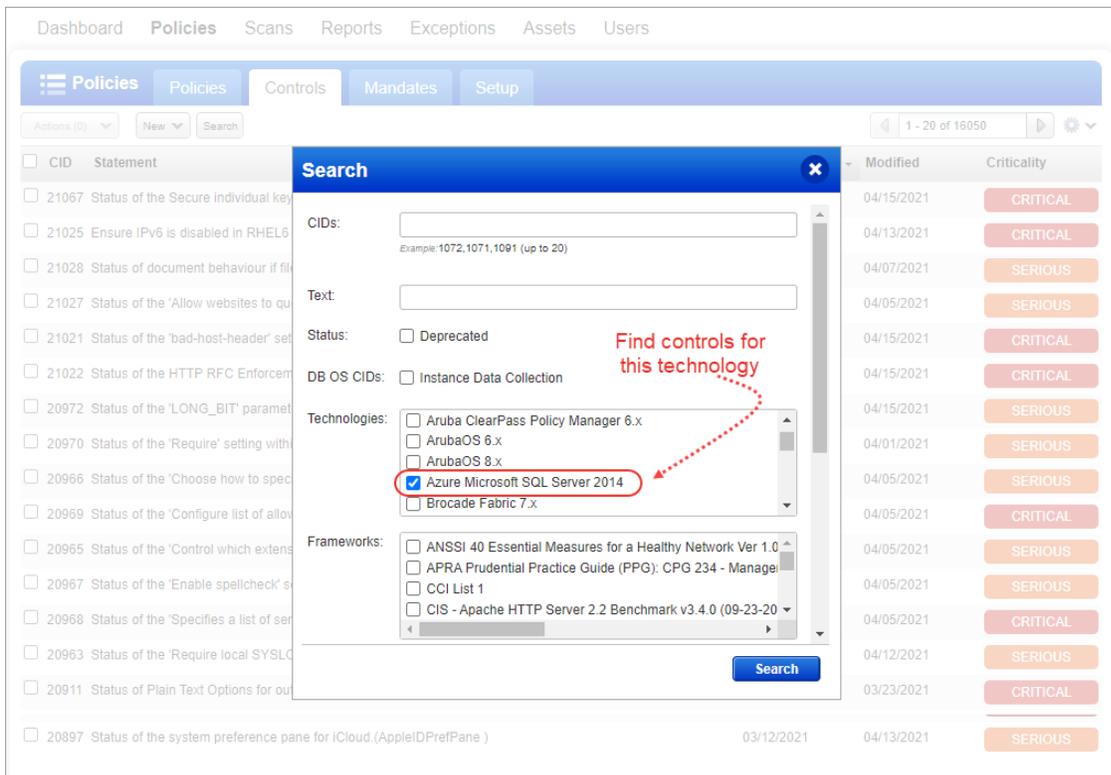
## Policies and Controls

You'll see Azure Microsoft SQL Server 2014 when creating new policies and searching controls.



## Search Controls

You'll see Azure Microsoft SQL Server 2014 when searching controls by technologies.



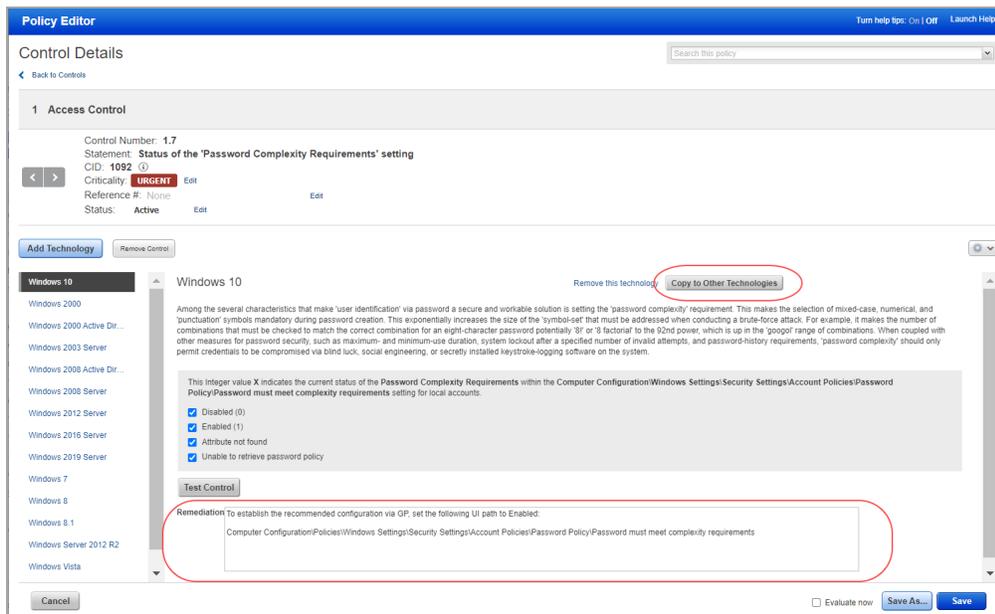
## New Features in Policy Editor: Remediation and Copy Control Settings

Starting with this release, users have the ability to customize remediation information for control technologies from within the Policy Editor UI. Remediation can be defined for both Service-Defined Controls (SDCs) and User-Defined Controls (UDCs). Each technology for a control can have a different, custom remediation value. Users also now have the option to copy control settings from one technology to all the other technologies for the same control.

We'll describe these features in more detail below:

Customize Remediation Information for each Control Technology

Copy Control Settings to Other Technologies



## Customize Remediation Information for each Control Technology

In the Policy Editor, drill-down into control details and you'll see the new **Remediation** text field as part of the control settings. Initially, this field will show remediation values defined by the service for Service-Defined Controls (SDCs) and remediation values defined by users for User-Defined Controls (UDCs). The remediation value can be changed in the policy by simply typing in the text field (up to 4000 characters). Each control technology can have a custom remediation value since the steps you take for remediation may vary by technology.

## Copy Control Settings to Other Technologies

When editing control details, you can copy control settings from one technology to all other technologies for the same control, including the remediation value. Drill-down into the control details for any control in your policy and pick a technology on the left side to see the control settings for that technology. Click the **Copy to Other Technologies** button to copy the settings from the selected technology to the other technologies listed in the policy for the same control.

## When settings cannot be copied

If the control criteria is different between the technology that you've selected and another technology for the control (e.g. different cardinality, operator or fixed value options), then only the remediation value will be copied. Other control settings will not be copied. You'll get a message on the screen that lets you know which technologies could not get all control settings.

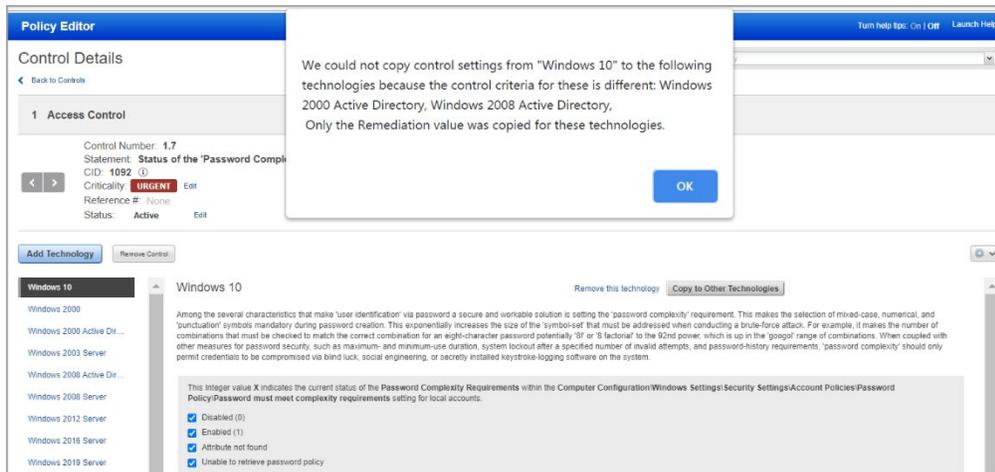
In the following example, I chose to copy control settings from Windows 10 to all other technologies for CID 1092. You'll notice that Windows 10 has these 4 check boxes selected:

- Disabled (0)
- Enabled (1)
- Attribute not found
- Unable to retrieve password policy

In this case, all control settings were copied to all other technologies, except Windows 2000 Active Directory and Windows 2008 Active Directory. Only the remediation value was copied to these technologies. The reason the other control settings were not copied is because the control criteria is different. Windows 2000 Active Directory and Windows 2008 Active Directory technologies only have 3 of the check boxes available:

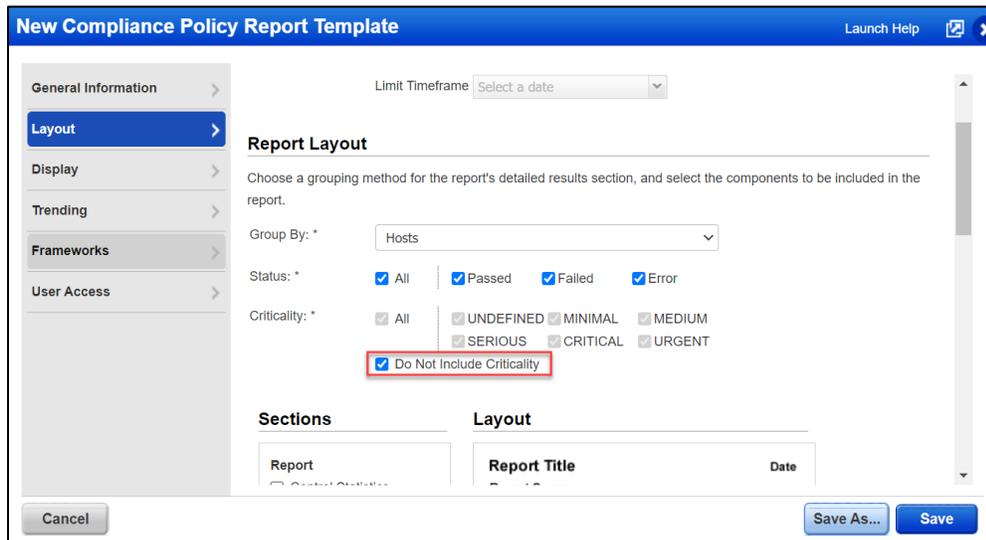
- Disabled (0)
- Enabled (1)
- Attribute not found

The check box "Unable to retrieve password policy" is not listed. Since "Unable to retrieve password policy" is selected for Windows 10 but cannot be selected for the Active Directory technologies, we could not copy the settings to the Active Directory technologies. Only remediation was copied for these. When this happens, you'll see a message like the one below.



## Do Not Include Criticality option in the Compliance Policy Report Template

This release introduces a new option in the Policy Report Template called “Do Not Include Criticality”. When you select this option, we won’t include criticality information in the Compliance Policy Report. The Criticality column will not appear in the Control Statistics section of the report, and the 2 pie charts with the total number of passed and failed controls at each criticality level will not appear in the report.

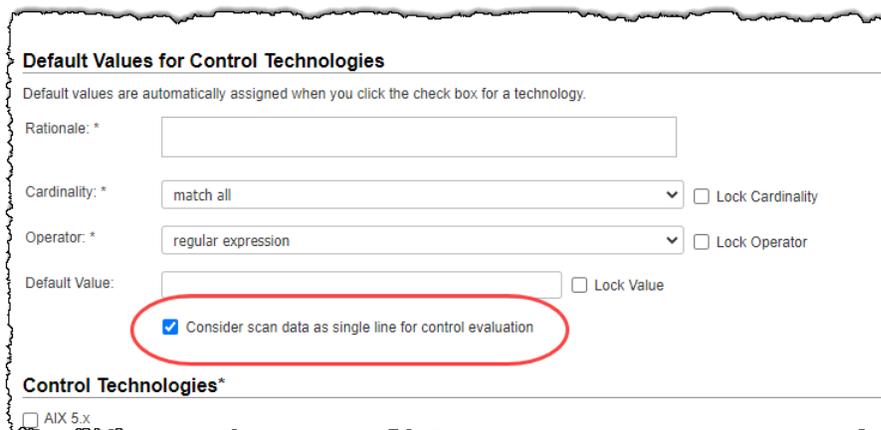


The screenshot shows the 'New Compliance Policy Report Template' dialog box. The 'Layout' tab is selected, and the 'Report Layout' section is active. The 'Group By' dropdown is set to 'Hosts'. The 'Status' section has checkboxes for 'All', 'Passed', 'Failed', and 'Error', all of which are checked. The 'Criticality' section has checkboxes for 'All', 'UNDEFINED', 'MINIMAL', 'MEDIUM', 'SERIOUS', 'CRITICAL', and 'URGENT'. The 'Do Not Include Criticality' checkbox is checked and highlighted with a red box. The 'Sections' and 'Layout' sections are also visible, with 'Report' and 'Report Title' fields.

## Unix File Content Check - Evaluate Multiline Regex Scan Data as Single line

We have now added an option to the File Content Check UDC (Unix) so that the multiline scan data can be considered as single line for successful control evaluation.

Simply navigate to Policies > Controls and in New > Control, select File Content Check from the Unix Control Types. In the Default Values for Control Technologies section, enable the “Consider scan data as single line for control evaluation” option.



The screenshot shows the 'Default Values for Control Technologies' dialog box. The 'Consider scan data as single line for control evaluation' checkbox is checked and highlighted with a red circle. The dialog box includes fields for 'Rationale', 'Cardinality' (set to 'match all'), 'Operator' (set to 'regular expression'), and 'Default Value'. There are also checkboxes for 'Lock Cardinality', 'Lock Operator', and 'Lock Value'. The 'Control Technologies' section is partially visible at the bottom, showing a checkbox for 'AIX 5.x'.

## OS Authentication-based Data Collection Support for IBM WebSphere Liberty

In the Qualys Cloud Platform 10.9 release, we added the **Instance Data Collection** tab in the compliance option profile. On this tab, you can enable data collection on the supported databases as well as OS-based applications and other technologies by using underlying OS-based authentication records.

In this release, we've added the OS authentication-based data collection support for IBM WebSphere Liberty instances. You'll see the new **IBM WebSphere Liberty** check box in the **Applications and Other Technologies** section on the **Instance Data Collection** tab. To enable data collection on IBM WebSphere Liberty instances by using underlying OS authentication record, you must first select the **Applications and Other Technologies** checkbox. Only then can you select the **IBM WebSphere Liberty** checkbox.

Currently we support the following versions of IBM WebSphere Liberty:

- IBM WebSphere Liberty 19.x
- IBM WebSphere Liberty 20.x

This support is available for Liberty instances running on Linux machines. So, if you have a UNIX authentication record (with Sudo as root delegation), you don't need a separate authentication record for IBM WebSphere Liberty instances. The UNIX record is used for data collection.

You can use these settings while creating or editing an option profile.

**New Compliance Profile** Launch Help

Compliance Profile Title >

Scan >

System Authentication >

Additional >

**Instance Data Collection >**

**Instance Data Collection Using OS Authentication Records**

Select database technologies and applications to enable data collection on them by using authentication records created for their underlying host operating systems.

Databases

- MongoDB
- Oracle
- MySQL
- MS SQL

**Note:** If you use individual database authentication records for compliance scans, we recommend not to use this option. If you enable it, you get duplicate results in compliance reports, one using database authentication records and the other using OS authentication records.

Applications and Other Technologies

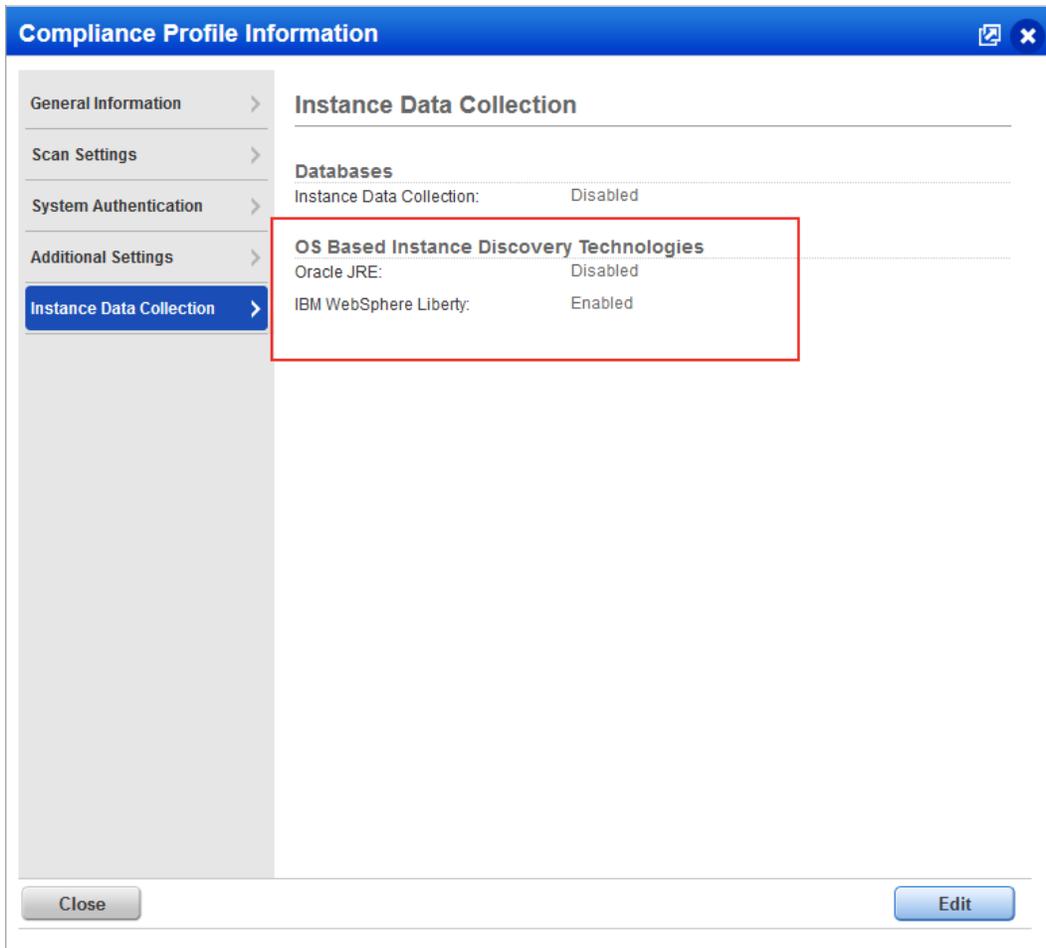
- Oracle JRE
- IBM WebSphere Liberty

Restore Defaults

Save Save As... Cancel

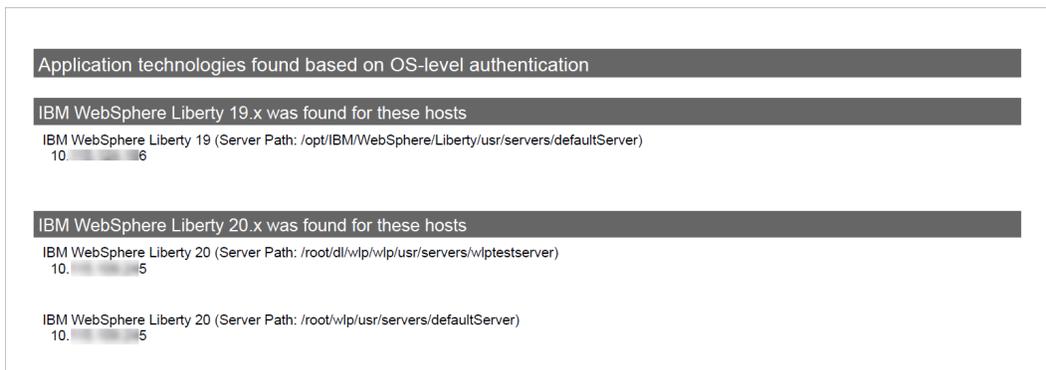
If you are using Cloud Agent for Policy Compliance (PC), IBM WebSphere Liberty instances are auto-discovered by the agent. To know more, see [Middleware Technologies Auto-discovered by Cloud Agents for PC](#).

After you save your changes, the settings in the option profile are used in the next compliance scan. You can always go back and review your compliance profile information and edit it if required.



### Sample Compliance Scan Result

Here's a sample compliance scan result, where, in the **Application technologies found based on OS-level authentication** section, you can see the hosts on which IBM WebSphere Liberty instances are identified.



## Sample Authentication Report

Here's a sample authentication report where you can check the authentication status of the IBM WebSphere Liberty instances that are scanned by using the underlying UNIX authentication records.

Results										
IBM Liberty 19.x 3 of 3 (100%)										
Unix/Cisco/Checkpoint Firewall										
HOST	NETWORK	HOST TECHNOLOGY	INSTANCE	STATUS	CAUSE	OS	LAST AUTH	LAST SUCCESS	HOST ID	ALL ASSET TAGS
10. (, -)	6 Global Default Network	CentOS 7.x		Passed	-	CentOS Linux 7.6.1810	04/15/2021	04/15/2021	6871163	IBM Liberty 19.x
10. (com, -)	6 n03 Global Default Network	CentOS 7.x		Passed	-	CentOS Linux 7.6.1810	04/27/2021	04/27/2021	6897268	Cloud Agent, IBM Liberty 19.x
Apache Web Server										
HOST	NETWORK	HOST TECHNOLOGY	INSTANCE	STATUS	CAUSE	OS	LAST AUTH	LAST SUCCESS	HOST ID	ALL ASSET TAGS
10. (, -)	6 n03 Global Default Network	Apache HTTP Server 2.4.x		Passed	-	CentOS Linux 7.6.1810	04/27/2021	04/27/2021	6897268	Cloud Agent, IBM Liberty 19.x
IBM Liberty 20.x 2 of 2 (100%)										
Unix/Cisco/Checkpoint Firewall										
HOST	NETWORK	HOST TECHNOLOGY	INSTANCE	STATUS	CAUSE	OS	LAST AUTH	LAST SUCCESS	HOST ID	ALL ASSET TAGS
10. (, -)	5 Global Default Network	CentOS 7.x		Passed	-	CentOS Linux 7.6.1810	04/15/2021	04/15/2021	6871162	IBM Liberty 20.x
10. (, -)	5 n03 Global Default Network	CentOS 7.x		Passed	-	CentOS Linux 7.6.1810	04/27/2021	04/27/2021	6889125	Cloud Agent, IBM Liberty 20.x

## Sample Policy Report

Here's a sample policy report where you can check the detailed results for each IBM WebSphere Liberty instance that is scanned against a policy.

(1.1) 19935 Status of the process identity of the running IBM Liberty process		SERIOUS
Category:	OS Security Settings	
Sub-Category:	System Settings (OSI layers 6-7)	
<b>IBM WebSphere Liberty 20.x</b>		
10. (liberty servers/defaultServer) (IBM WebSphere Liberty 20 (Server Path: )) <b>Passed</b>		
Instance	IBM WebSphere Liberty 20 (Server Path: /root/wlp/usr/servers/defaultServer)	
Previous Status	Passed	
First Fail Date	N/A	
OS:	CentOS Linux 7.6.1810	
Last Scan Date:	04/21/2021 at 13:00:47 (GMT-0700)	
Network:	Global Default Network	
Tracking Method:	AGENT	
Qualys Host ID:	a	
Asset Tags:	Cloud Agent	
The following List String value(s) X indicate the process identity of the IBM WebSphere Liberty		
<b>Expected</b>	matches regular expression list	
	OR, any of the selected values below:	
	<input checked="" type="checkbox"/> Setting not found	
<b>Actual</b>	Last Updated:04/21/2021 at 11:15:33 (GMT-0700)	

## Support for OS Authentication-based Technology Qualys Cloud Agent

We've expanded our data collection and evaluation support for OS authentication-based technologies to include Qualys Cloud Agent as a new technology. For Qualys Cloud Agent, you can collect technology data and scan it for middleware compliance assessment by using the underlying OS-authentication records (Windows or Unix). You do not need to create a separate authentication record for the Qualys Cloud Agent technology.

You can now include the Qualys Cloud Agent technology in your compliance policies and when searching for controls. You'll also see the Qualys Cloud Agent host instance information in policy compliance authentication reports, scan results, and policy reports.

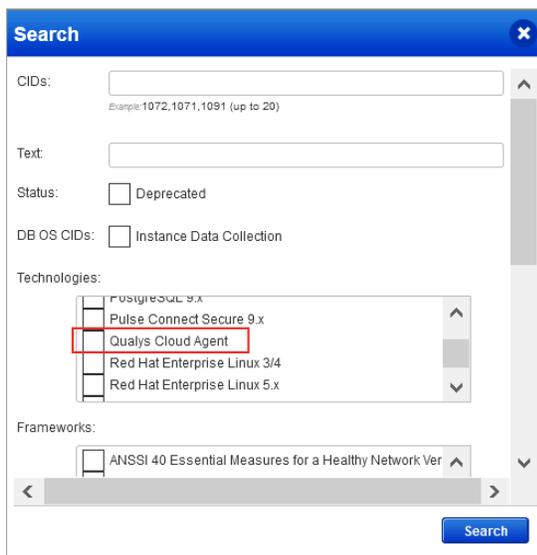
### Qualys Cloud Agent in Policy Editor

While creating or editing a policy in Policy Editor, you can now select Qualys Cloud Agent in the **Search technologies** dropdown list.



### Searching Controls for Qualys Cloud Agent

You can now search for controls related to the Qualys Cloud Agent technology. Go to **Policies > Controls > Search** and select **Qualys Cloud Agent** in the **Technologies** list.



## Sample Authentication Report

To display all OS auth-based instance technologies per host in your authentication report, go to **Reports > New > Authentication Report** and enable the **OS Authentication-based Technology** option in the **Appendix** section.

**New Authentication Report** Launch Help

Use the following form to create a new authentication report on compliance data.

**Report Details**

Title:

Report Format:

**Report Source\***

Select at least one business unit, asset group, IP or asset tag to draw data from.

Business Units  Asset Groups  IPs  Asset Tags

Select items...

**Display & Filter**

Select the items you want to show in your report.

**Details**

Summary Section

Details Section

Additional Host Info (OS, scan date, successful auth date)

Host ID

All Asset Tags

**Appendix**

OS Authentication-based Technology

**Report Options**

Scheduling

Here's a sample authentication report where in the **Appendix** section, you can see the Qualys Cloud Agent instances scanned by using the underlying OS authentication records.

Appendix		
Targets with OS authentication-based technologies		
10.10.10.10 (win-10.10.10.10, WIN-10.10.10.10)		
Network: Global Default Network		Last Auth: 03/30/2021 at 04:22:27 PM (GMT-0700)
OS: Windows Server 2012 R2 Standard 64 bit Edition		Last Success: 03/30/2021 at 04:22:27 PM (GMT-0700)
S.N.	Host Technology	Instance
1	Mozilla Firefox (Windows)	Mozilla Firefox (Windows)
2	Internet Explorer 11	Internet Explorer 11
3	Qualys Cloud Agent	Qualys Cloud Agent
10.10.10.10 (-, -)		
Network: Global Default Network		Last Auth: 03/30/2021 at 04:43:29 PM (GMT-0700)
OS: Oracle Enterprise Linux 8.0		Last Success: 03/30/2021 at 04:43:29 PM (GMT-0700)
S.N.	Host Technology	Instance
1	Qualys Cloud Agent	Qualys Cloud Agent (Installation Path: /usr/local/qualys/cloud-agent)
10.10.10.10 (win-10.10.10.10, WIN-10.10.10.10)		
Network: Global Default Network		Last Auth: 03/30/2021 at 04:23:03 PM (GMT-0700)
OS: Windows Server 2008 Standard Service Pack 1		Last Success: 03/30/2021 at 04:23:03 PM (GMT-0700)
S.N.	Host Technology	Instance
1	Qualys Cloud Agent	Qualys Cloud Agent

## Sample Compliance Scan Result

Here's a sample compliance scan result, where, in the **Application technologies found based on OS-level authentication** section, you can see the hosts on which Qualys Cloud Agent instances are identified.

**Application technologies found based on OS-level authentication**

**Qualys Cloud Agent was found for these hosts**

Qualys Cloud Agent  
10.10.10.10, 10.10.10.11, 10.10.10.12

Qualys Cloud Agent (Installation Path: /usr/local/qualys/cloud-agent)  
10.10.10.10, 1

## Sample Policy Report

And here's a sample policy report where you can check the detailed results for each Qualys Cloud Agent instance that is scanned against a policy.

**Detailed Results**

10.10.10.10	(win-10.10.10.10, WIN-10.10.10.10)	Windows Server 2012 R2 Standard 64 bit Edition
-------------	------------------------------------	--

Controls: 5  
 Passed: 5 (100%)  
 Failed: 0  
 Error: 0  
 Approved Exceptions: 0  
 Pending Exceptions: 0  
 Last Scan Date: 03/30/2021 at 16:12:57 (GMT-0700)  
 Network: Global Default Network  
 Tracking Method: IP  
 Qualys Host ID: -  
 Asset Tags: Windows CA agent Tech

**Qualys Cloud Agent**

1. Untitled

<b>(1.2) 18032</b>	<b>List of manifests on Qualys Cloud Agent (Windows)(Qualys Cloud Agent)</b>	<b>Passed</b>	<b>SERIOUS</b>
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Instance: Qualys Cloud Agent  
 Evaluation Date: 03/30/2021 at 16:22:42 (GMT-0700)

Qualys Cloud Agent (Windows) supports different types of manifests e.g Inventory PC, VM, IOC, FIM, Middleware, auto-discovery, PM, SCA and UDC. each manifest contains respective command set to execute and collect data from the asset. Manifests should be enabled from the platform according to the security needs of the business.

The following List String value(s) of X indicates the status of the manifest type on the Windows host

<b>Expected</b>	<b>matches regular expression list</b>
	*
	<b>OR, any of the selected values below:</b>
	<input checked="" type="checkbox"/> Setting Not Found
	<input checked="" type="checkbox"/> File Not Found
<b>Actual</b>	<b>Last Updated:03/30/2021 at 16:12:57 (GMT-0700)</b>
	AutoDiscovery
	Inventory
	MiddlewarePC
	PolicyCompliance
	UDC

# Qualys Cloud Platform

## Auto adjust during Daylight Saving Time option for Schedules

You'll notice when scheduling scans and reports that we changed the "DST" option to "Auto adjust during Daylight Saving Time". We made this UI change to help users more clearly understand what to expect when using this option.

When the "Auto adjust during Daylight Saving Time" option is selected, the start time for your scheduled scan/report will be adjusted automatically during time changes so you don't have to make any edits to your schedule at these times. For example, let's say you pick the time zone "(GMT -08:00) United States, California (Pacific Standard Time)", which observes DST. When Daylight Saving Time starts in the Spring, the start time for your schedule will move forward an hour. When Daylight Saving Time ends in the Fall, the start time will be adjusted back an hour.

Note that this new option is selected by default when DST is observed for the selected time zone, and is disabled for locations that never observe DST like Arizona and Hawaii.

### Sample - Scheduling Settings for Scan

The screenshot shows a dialog box titled "New Scheduled Compliance Scan". On the left is a sidebar with navigation options: Task Title, Target Hosts, Scheduling (highlighted), Notifications, and Schedule Status. The main area is titled "Scheduling" and contains the following fields:

- Start: Apr 26, 2021, 04:30
- Time Zone: (GMT -08:00) United States, California (Pacific Standard Time)
- Auto adjust during Daylight Saving Time (highlighted with a red box)
- Duration:  Pause after 01 hours 00 minutes
- Resume: Manually 00 hours
- Occurs: Daily, 1 days
- Ends after [ ] occurrences

Buttons for "Cancel" and "Save" are at the bottom.

### Sample - Scheduling Settings for Report

The screenshot shows a dialog box titled "Report Options". The "Scheduling" option is checked. Below it, the text reads "Schedule this report to run automatically at the time you specify." The fields are:

- Start: Apr 26, 2021, 00:00
- Time Zone: (GMT +00:00) United Kingdom (Greenwich Mean Time)
- Auto adjust during Daylight Saving Time (highlighted with a red box)
- Occurs: Daily, 1 days
- Ends after [ ] occurrences

## Issues Addressed

- We fixed a performance issue where in some cases the Scans > Schedules tab in the UI was slow to load. Now it will load faster.
- We made performance improvements to the Policy Editor page.
- We fixed an issue in the PCI Scan Report Template where the user was not able to save a search list in the template using the Search List Exception workflow on the PCI Risk Ranking tab.
- The Cause of Failure feature in the Policy Report Template was not working in some cases. Now, after this fix, we'll show correct values in the Unexpected Values section of the report.