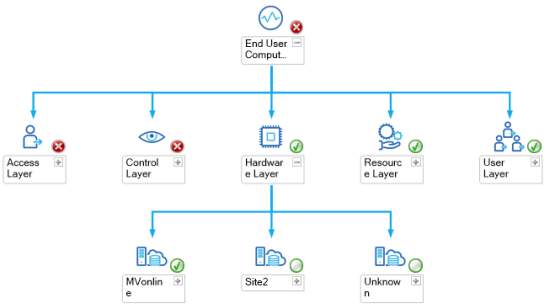
Quick Installation Guide

MetrixInsight for CVAD



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Introduction

This document provides guidance for installing and configuring the MetrixInsight for CVAD Management Pack in a Microsoft System Center Operations Manager 2012 R2/ 2016/ CB environment.

Prerequisites

This chapter contains the prerequisites for installation of the management pack as described in this guide.

Supported software

The following **Microsoft System Center Operations Manager** releases are supported:

- System Center Operations Manager 2012 R2 (SCOM 2012 R2)
- System Center Operations Manager 2016 (SCOM 2016)
- System Center Operations Manager Current Branch
- System Center Operations Manager 2019 (SCOM 2019)

The following **Operating Systems** are supported:

- Windows Server 2008 R2
- Windows Server 2012
- Windows Server 2012 R2
- Windows Server 2016

The following **Citrix components** are supported:

- Citrix StoreFront 2.6 or higher
- Citrix Provisioning Services 7.x*
- Citrix Virtual Apps & Desktops (formerly XenApp/XenDesktop) 7.x**

* Needs at least PVS console **7.7** or higher installed on the PVS servers
** The Citrix Studio console needs to be installed on each delivery controller

PowerShell and WinRM

All SCOM Management Servers, Delivery Controllers, StoreFront Servers, License Servers, Provisioning Servers and Server OS Machines should at least have PowerShell 4.0 or higher installed. By default, Windows Server 2012 R2 and up already have this prerequisite in-place.

Also Windows Remote Management (WinRM) needs to be enabled and available on the Delivery Controllers, StoreFront Servers, License Servers, Provisioning Servers and Server OS Machines. By default, Windows Server 2012 R2 and up already have this prerequisite in-place.

If you are using Windows Server 2008 R2 machines, the following command is an easy way to implement this prerequisite:

Winrm quickconfig

SCOM agent

SCOM agents need to be installed and working properly on all Delivery Controllers, StoreFront Servers, License Servers and Provisioning Servers.

For these SCOM agents the following agent property needs to be enabled: **"Allow this agent to act as a proxy and discover managed objects on other computers"**.

Citrix Licenses

To be able to discover your CVAD environment by our management pack, make sure your Citrix CVAD licenses are loaded and functioning within your Citrix License server.

Firewall

For the management pack to operate properly, the following firewall rules should be in place in addition to the standard firewall ports the SCOM platform requires:

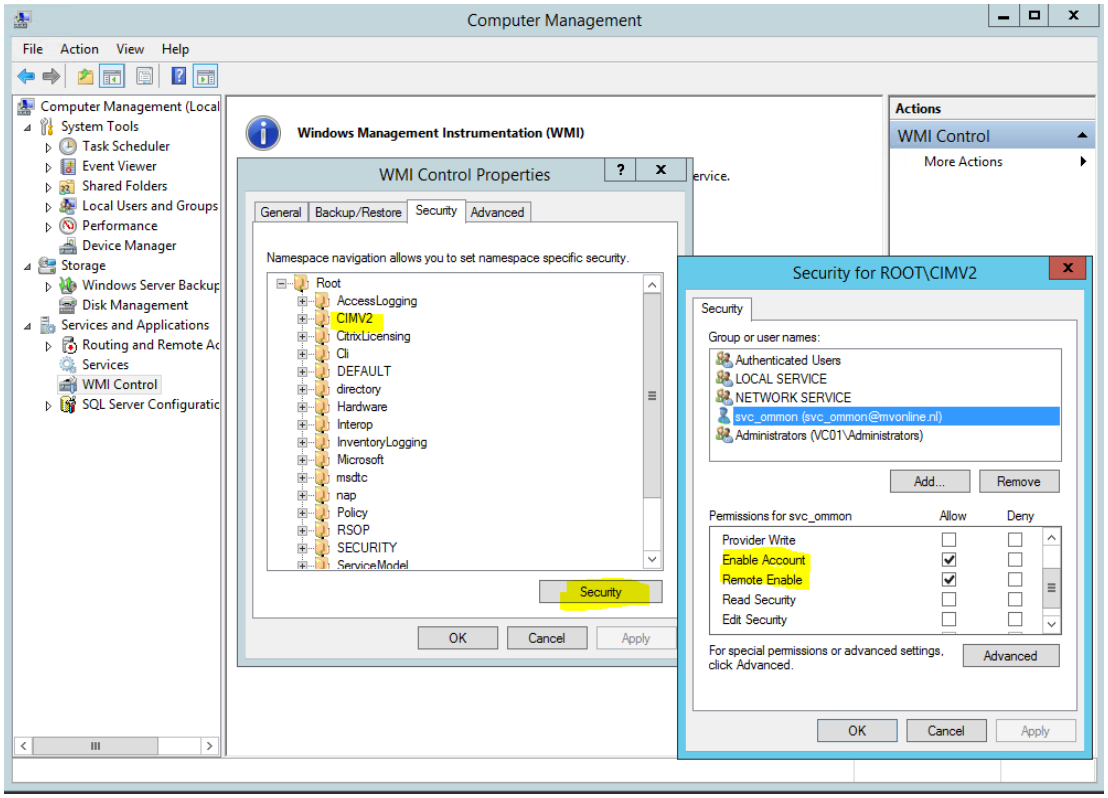
Source	Protocol & port	Destination	Notes
MetrixInsight Resource Pool members. By default, these are the SCOM agents from the respective: Delivery Controller(s) StoreFront Server(s) Provisioning Server(s)	WinRM (TCP 5985)	Citrix CVAD Delivery Controller(s) Citrix StoreFront Server(s) Citrix Provisioning Server(s) Server OS Machines	
Citrix CVAD Delivery Controller(s)	DCOM-WMI (TCP 135 & TCP 49152 – 65535 (dynamic port range)) This is useful if you want to assign a static port for WMI instead: https://docs.microsoft.com/en-us/windows/desktop/wmisdk/setting-up-a-fixed-port-for-wmi	Citrix License server	**This is only required** when the license server name configured within your CVAD site configuration is a **DNS alias** or **cluster name**.

Run as account

A domain user account with the **at least** the following minimal permissions need to be configured, as this account will be used as the Run As account within SCOM:

- Member of the Active Directory **Domain Users** Global Security Group.
- **Read Only Administrator** Role permissions within the Virtual Apps and Desktops site(s) (configure via Citrix Studio).
- Member of the local **Administrators** group on all Provisioning Servers.
- **Farm Admin Role** permissions for Provisioning Services (configure via Provisioning Services Console).
- Member of **Remote Management Users** Local Security Group on Delivery Controllers, StoreFront Servers, License Servers, Provisioning Servers and Server OS Machines*****
- Allow **Enable Account** and **Remote Enable** permissions at the namespace ROOT\CIMV2 within WMI Control on License Servers and Server OS Machines.

The security properties for WMI control can be found in the following console:



***** = When using Windows Server 2008 R2 as Operating System for these components, make the Run As account member of the local administrator group instead.

(Optional) external instances

MetrixInsight for CVAD uses a few external management packs to embed a complete stack in the topology view, like SQL databases and Active Directory. These external instances are optional and not required for our management pack to function.

If you would like to make use of this feature in our management pack, the following external management packs should be imported in your environment. These packs are available and can be downloaded for free at Microsoft.com

- Microsoft System Center Management Pack for SQL Server 2008-2012
  https://www.microsoft.com/en-us/download/details.aspx?id=10631
- Microsoft System Center Management Pack for SQL Server 2014
  https://www.microsoft.com/en-us/download/details.aspx?id=42573
- Microsoft System Center Management Pack for ADDS
  https://www.microsoft.com/en-us/download/details.aspx?id=54525

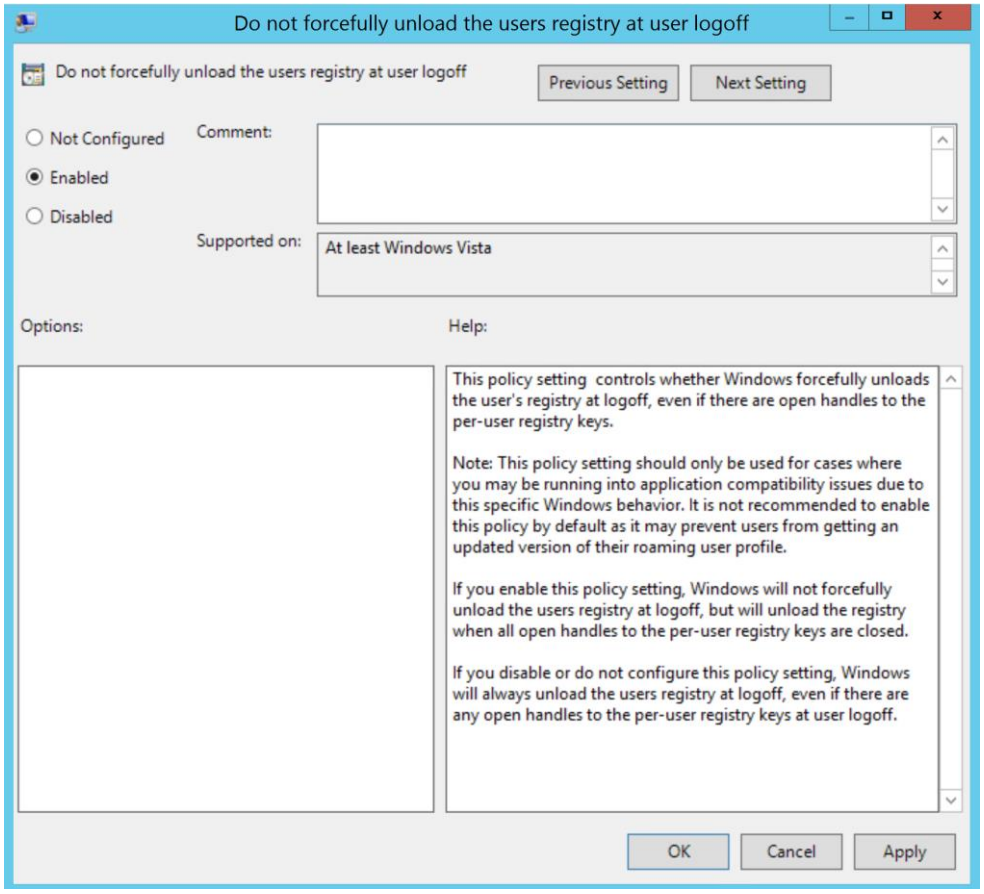
Windows policy

As the workflow runs under a domain user account, the Windows User Profile service needs to be configured to not forcefully unload user profile on logoff. This is enabled by default since Windows Vista/ Server 2008. More information about this behavior can be found here: https://support.microsoft.com/en-us/help/2287297/a-com-application-may-stop-working-on-windows-server-2008-when-a-user

By default, the workflows run on the StoreFront Servers, Delivery Controllers and Provisioning Servers.

The following **policy needs to be configured** on the machines running the workflow by using a local or domain policy:

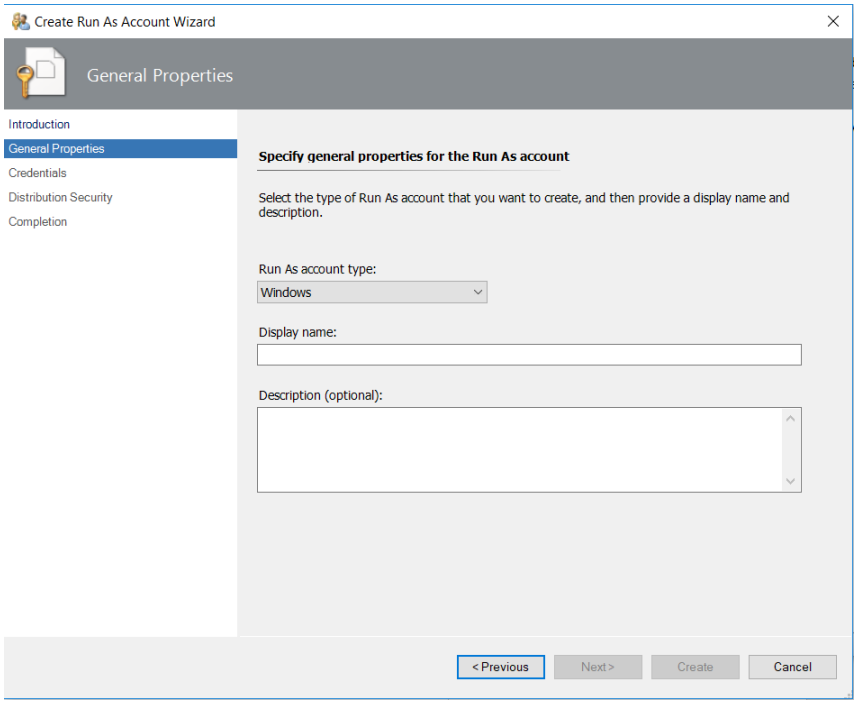
1. Computer Configuration > Administrative Templates > System > User Profiles
2. In the right pane, double-click on Do not forcefully unload the user registry at user logoff.
3. In the resulting window, click in the radio button Enabled.



Quick Installation steps

The following steps need to be done to perform the installation of the management pack.

- Create a Windows **Run As account** in System Center Operations Manager.



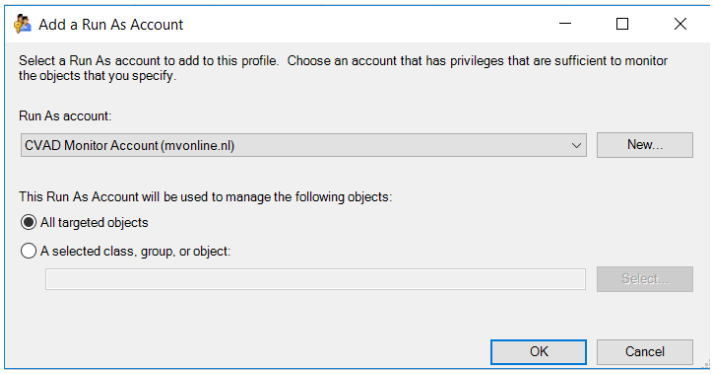
  Make sure the **Run As account** gets distributed properly to concerning agents using the **Distribution** tab. By default, these are the agents on the Delivery Controllers, License Servers, StoreFront Servers and Provisioning Servers.

  The account must have the permissions assigned as mentioned above in the prerequisite section.

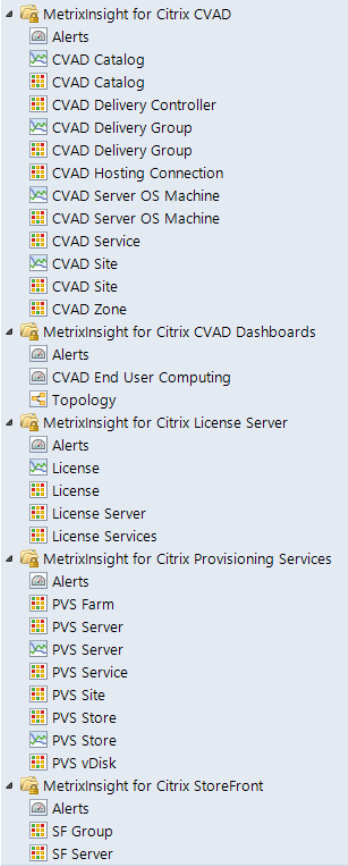
- Extract and import the management pack files from the zip file you received by email from GripMatix into your System Center Operations Management management group. It should contain the following files:

  - MetrixInsight.EndUserComputing.Citrix.CVAD.ExtInst.mpb
  - MetrixInsight.EndUserComputing.Citrix.CVAD.mpb
  - MetrixInsight.EndUserComputing.Citrix.Dashboards.mpb
  - MetrixInsight.EndUserComputing.Citrix.LS.mpb
  - MetrixInsight.EndUserComputing.Citrix.PS.mpb
  - MetrixInsight.EndUserComputing.Citrix.SF.ExtInst.mpb
  - MetrixInsight.EndUserComputing.Citrix.SF.mpb
  - MetrixInsight.EndUserComputing.mpb

- Associate the **Run As account** you configured earlier to the **MetrixInsight Citrix Run As Profile**.



- Discovery can take up for 4 hours after completing the above steps. When done you should see your Citrix CVAD stack components using the following state and topology views:



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