Argent for Microsoft 365

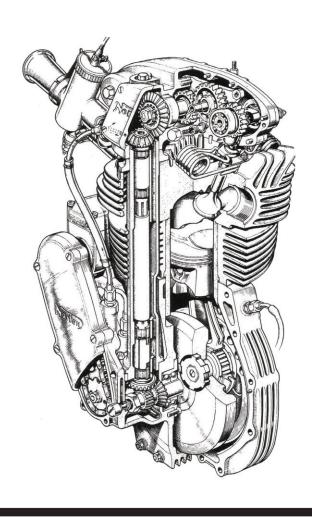


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Introduction

For reliable operation, it is essential to ensure that all Microsoft 365 functions and services are operating correctly; Argent Omega for Microsoft 365 <u>automates</u> the monitoring and management of Microsoft 365.

Argent Omega for Microsoft 365 tool sets provides a clear and detailed view into the health of every component of your **Microsoft** 365 infrastructure, including license details, service health, endpoint status, etc. Argent Omega for Microsoft 365 also checks facilities such as Exchange Online, SharePoint Online, Microsoft Team storage, OneDrive usage, etc.

Prerequisites To Run Microsoft 365 Rules

- 1. PowerShell 5.1 or later should be installed in the Generator.
- 2. Install the following PowerShell modules in the Generator:
 - ExchangeOnlineManagement (Version 2.0.4).
 - AzureAD (Version 2.0.2.76).
 - SharePointPnPPowerShellOnline (Version 3.29.2101.0)
 - MicrosoftTeams (Version 1.0.3)

etc.

- 3. .NET Framework Runtime 4.8 or above should be installed in the Generator.
- Enterprise App authenticates using Certificate. (Client Secret should not be used).
 Argent Omega requires Microsoft Azure Active Directory authentication to access Microsoft 365
 facilities such as Exchange Online, SharePoint Online, Microsoft Team storage, OneDrive usage,

Credentials are used by Argent Omega to authenticate as itself, requiring no interaction from a user at runtime. Azure Active Directory allows both certificates and client secrets (a string) as credentials to the confidential client app registration. While client secrets can easily be created in the Azure portal, it is better to use a certificate.

Install PowerShell Modules

Before installing PowerShell Modules, set the security protocol to **TLS 1.2**. The command to add security protocol in PowerShell is written below—

```
[Net.ServicePointManager]::SecurityProtocol = [Net.SecurityProtocolType]::Tls12
```

Below are the commands to install PowerShell Modules -

• ExchangeOnlineManagement

Install-Module -Name ExchangeOnlineManagement -RequiredVersion 2.0.4

AzureAD

Install-Module -Name AzureAD -RequiredVersion 2.0.2.76

• SharePointPnPPowerShellOnline

Install-Module -Name SharePointPnPPowerShellOnline -RequiredVersion 3.29.2101.0

• MicrosoftTeams

Install-Module -Name MicrosoftTeams -RequiredVersion 1.0.3

Log-On Screen



Argent Omega validates the authenticity of users through a log-on screen.

There are three types of user accounts:

- Windows User Accounts
- Demo Accounts
- Internal Accounts

The Argent server is typically in an Active Directory Domain environment and the user is authenticated by Active Directory.

Local Windows user authentication is used instead if the Argent server is standalone or in a Workgroup. With Windows user accounts, the best approach is to create a separate user group for Windows users and assign the required rights.

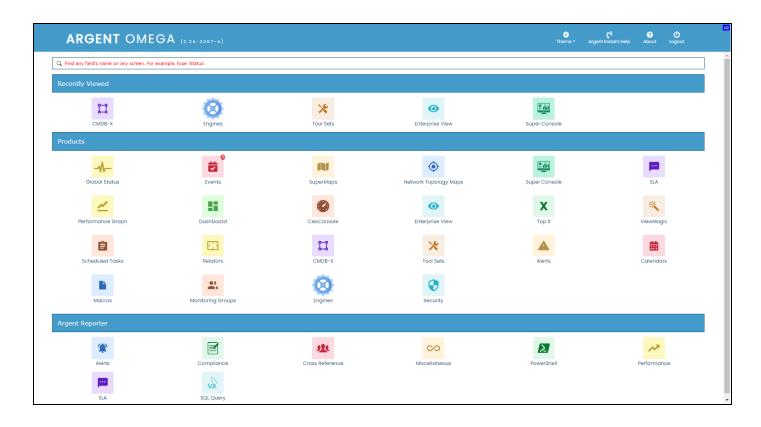
Demo accounts can be created in the **Argent Omega Security** section and are used for demonstration purposes. Demo accounts are <u>read-only accounts</u> and use Argent private authentication to log into Argent Omega. Demo accounts are usually only used temporarily for initial training and are limited to a few specific IP addresses. Argent engineers can create demo training accounts for you at no cost.

Internal accounts also can be created in the **Argent Omega Security** section, and **behave like normal Windows accounts**, using Argent's private authentication for login.

The Argent Omega username is case insensitive but the <u>password is case sensitive</u>.

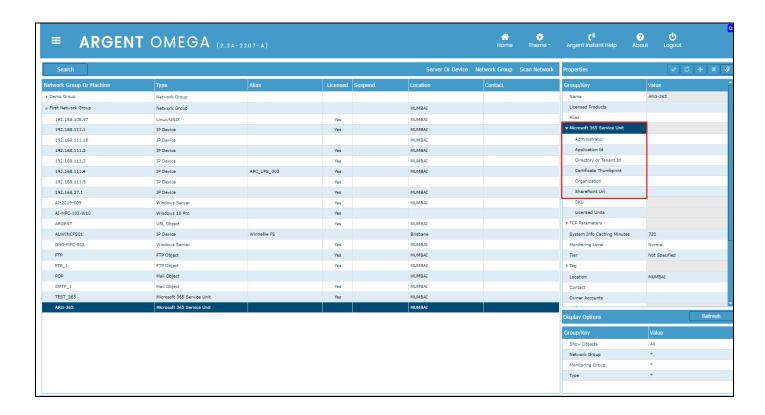
Home Screen

The Argent Omega home screen will be displayed after login:

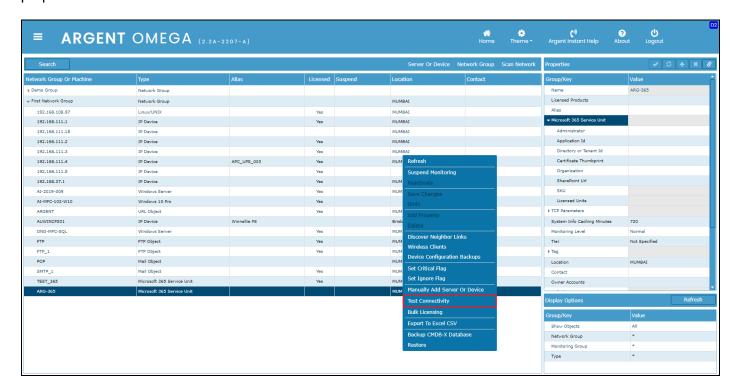


Microsoft 365 Service Unit Credentials

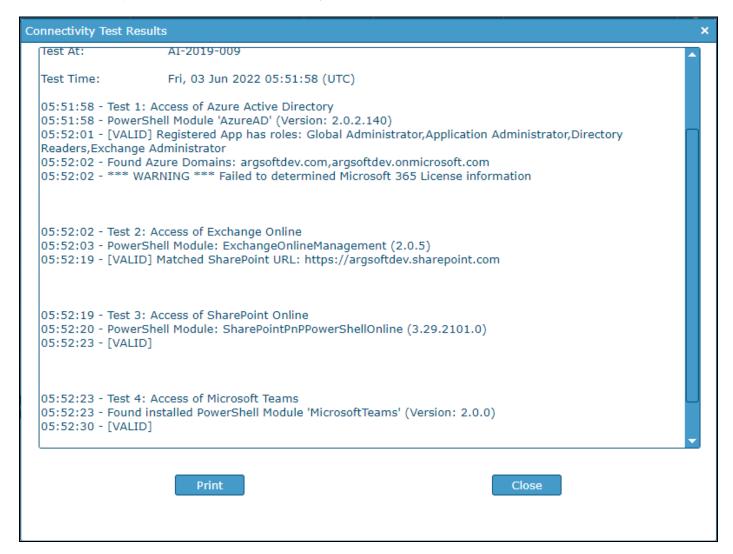
Before running Microsoft 365 Rule, configure the following highlighted Microsoft 365 Unit credentials in the CMDB-X screen:



After configuring Microsoft 365, select **Test Connectivity** from right click menu or click from properties:



This is an example of a successful Connectivity Test Result:



Tool Sets For Argent Omega for Microsoft 365

Argent Omega provides a bundle of Rules to monitor a Microsoft 365 cloud platform.

The Rules are categorized into the following classes:

System Management Rules

Checks the health of Microsoft 365 services and provides alerts on errors. Argent Omega for Microsoft 365 provides built-in Rules to alert when a subscription license is about to expire, when there is a critical message in Message Center, etc.

Service Connectivity Rules

Monitors the availability status and performance of Microsoft 365 services

Exchange Online

Monitors different performance metrics of Exchange Online service

SharePoint Online

Monitors different performance metrics of SharePoint Online service

Team Storage Usage Rule

Monitors storage usage of Team SharePoint site

OneDrive Personal Usage Rule

Monitors storage usage of Personal SharePoint site

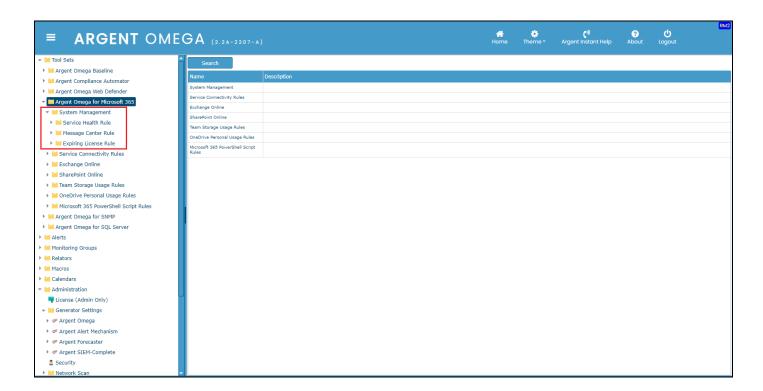
Argent Omega Rules

The following section contains the detailed description of Argent Omega Rules to monitor critical Microsoft 365 services.

System Management Rules

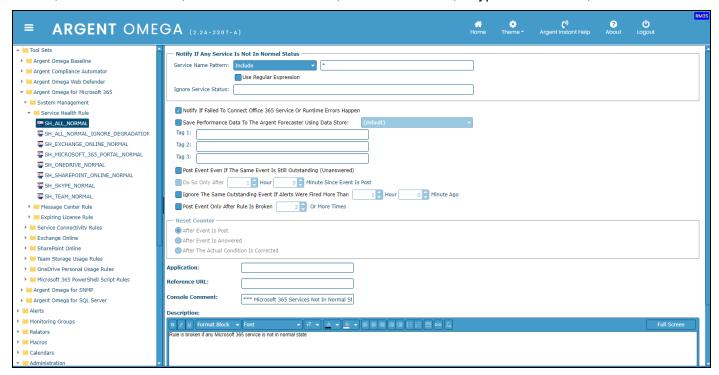
System Management section consists of three categories of Rules, namely:

- Service Health Rule
- Message Center Rule
- Expiring License Rule

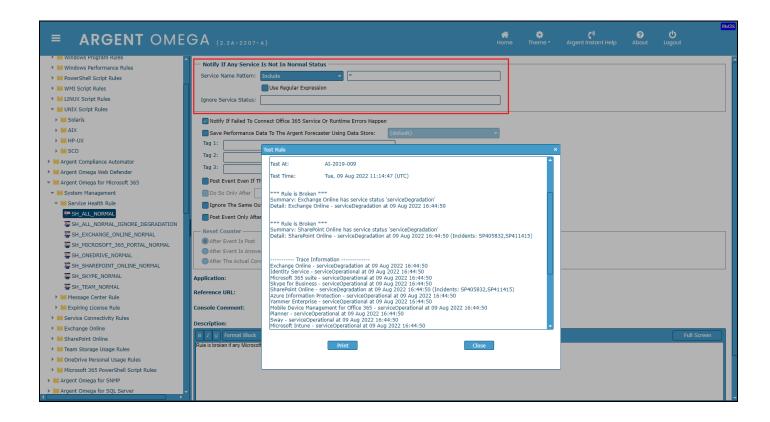


Service Health Rules

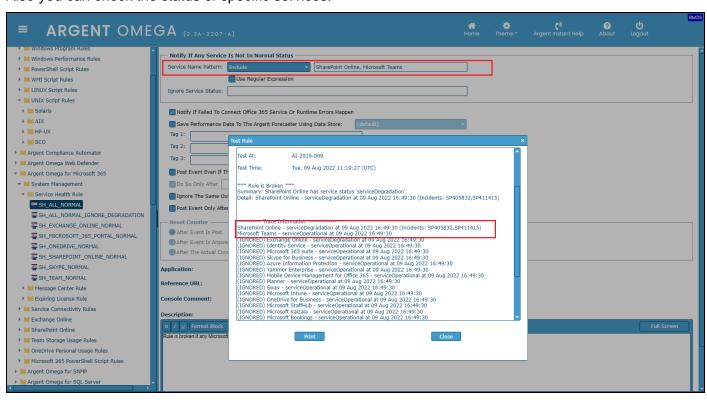
This section contains Rules to monitor the health of critical Microsoft 365 services, such as Exchange Online, SharePoint Online, OneDrive for Business, Microsoft Teams, Skype for Business, etc.



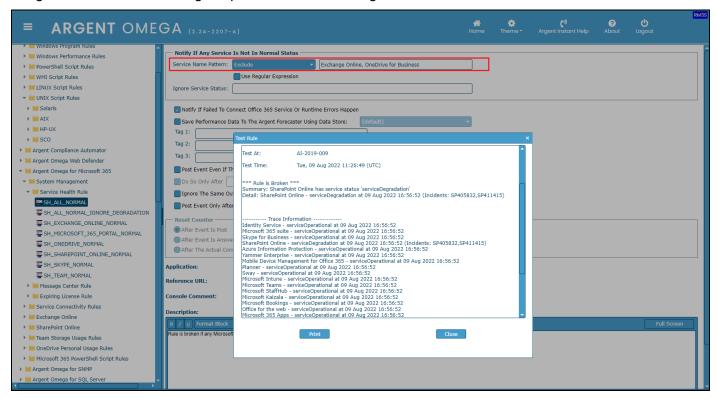
In **Notify If Any Service Is Not In Normal Status** block, specify the service name so that it will alert if the specified service is not in normal state. **There is an option to Use Regular Expression in the service name.** Include or Exclude Service name to check status. Specify "*" to check the status of all available Microsoft 365 services.



Also you can check the status of specific services:

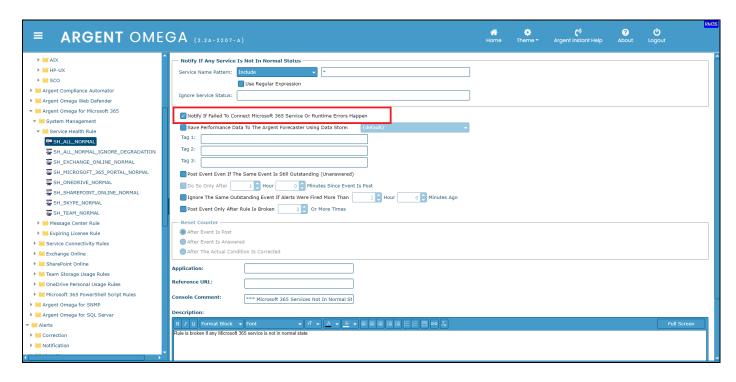


To ignore the status checking of specific services, configure the Rule like below:



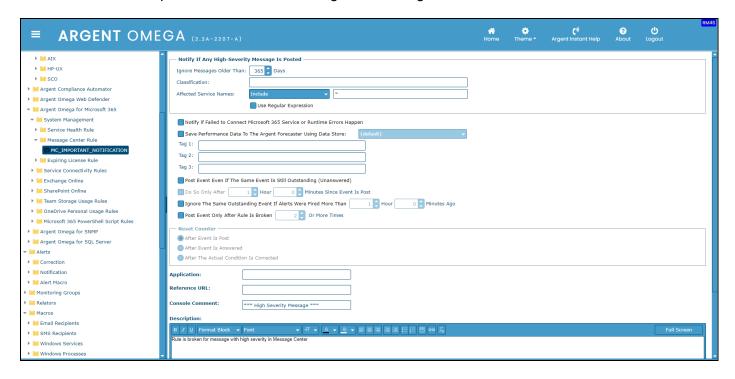
Specify comma separated status names in **Ignore Service Status** input box to skip the checking of specific service statuses.

Check the option **Notify If Failed To Connect Microsoft 365 Service Or Runtime Errors Happen** to fire an Alert when connection failure or runtime errors occur.



Message Center Rules

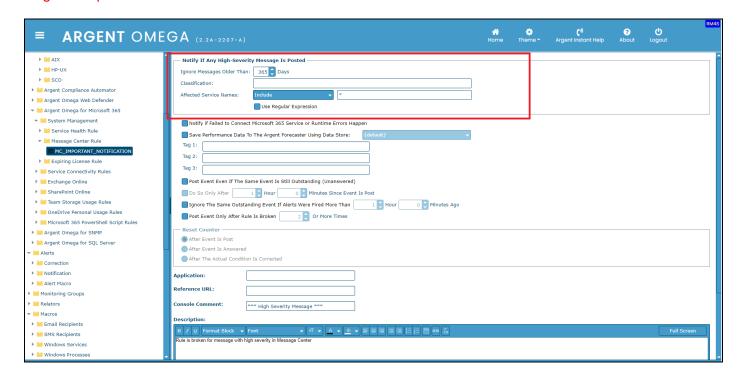
This Rule checks the presence of critical messages in Message Center.



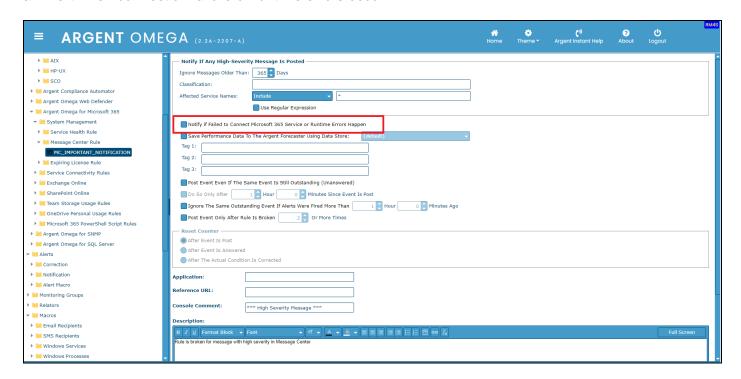
In Notify If Any High-Severity Message Is Posted block, specify the number of days in Ignore Messages

Older Than option to skip older messages. Specify the Classification of messages.

Include or Exclude **Affected Service Names**. Check **Use Regular Expression** option if you want to use Regular Expression in service names.

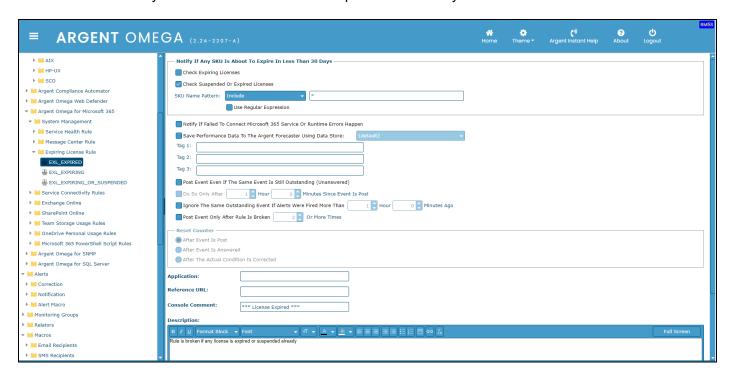


Check the option **Notify If Failed To Connect Microsoft 365 Service Or Runtime Errors Happen** to fire an Alert when connection failure or runtime errors occur.

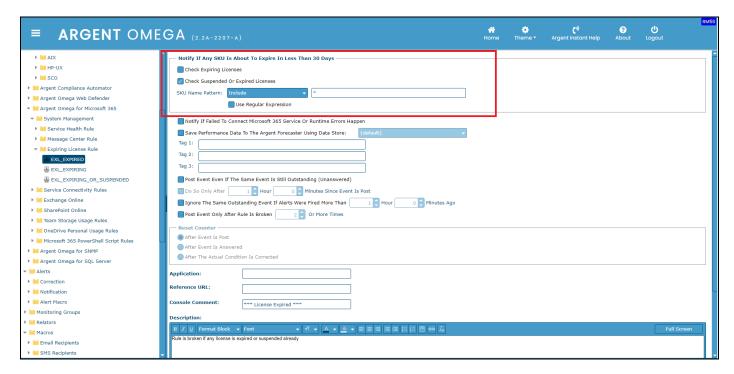


Expiring License Rules

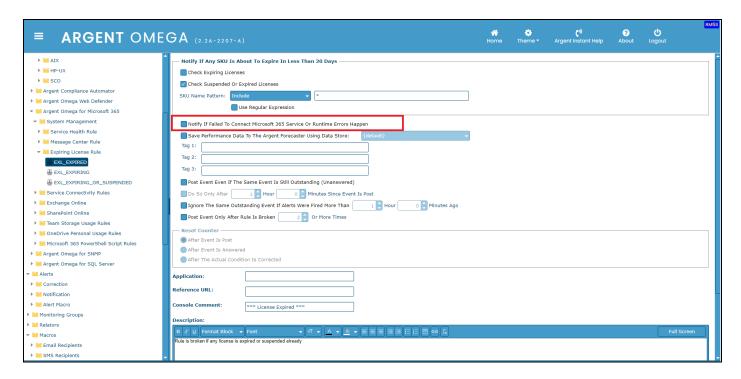
This Rule alerts if any Microsoft 365 license will expire within 30 days.



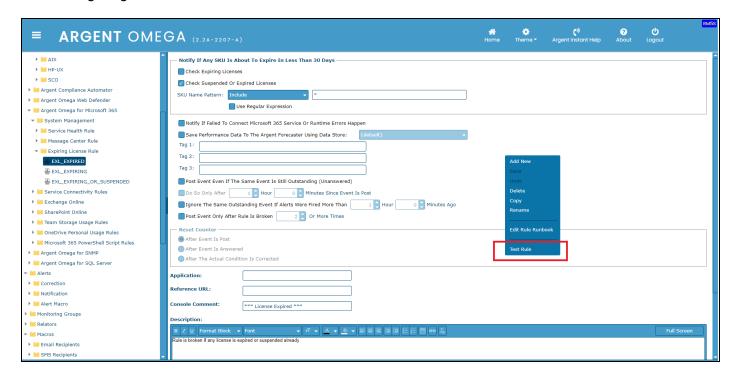
In **Notify If Any SKU** is **About To Expire In Less Than 30 Days** block, check and specify the options to check SKU (Stock-Keeping Unit) is expiring within 30 days. **Check or Uncheck** Expiring Licenses and Suspended or Expired Licenses. **Include or Exclude** SKU Name. **Check Use Regular Expression** option to use Regular Expression in SKU name.



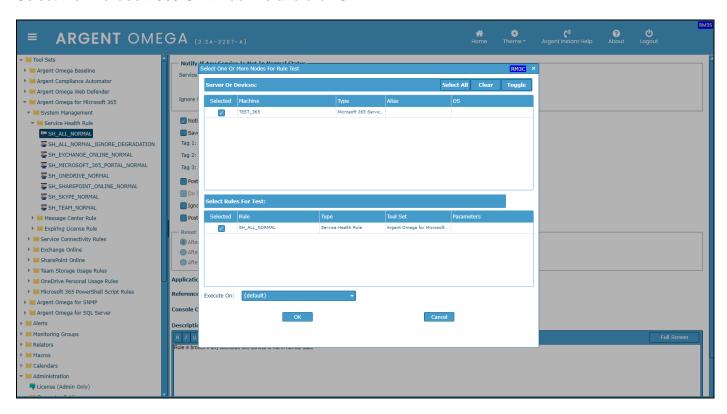
Check the option **Notify If Failed To Connect Microsoft 365 Service Or Runtime Errors Happen** to fire an Alert when connection failure or runtime errors occur.



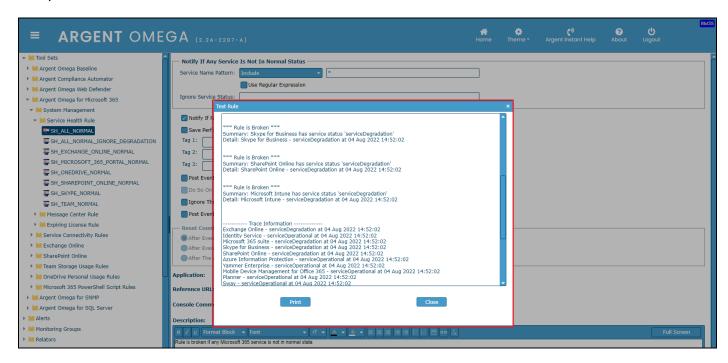
After configuring the Rule, select Test Rule



Select the Microsoft 365 Unit Machine and click OK



Sample Rule result:

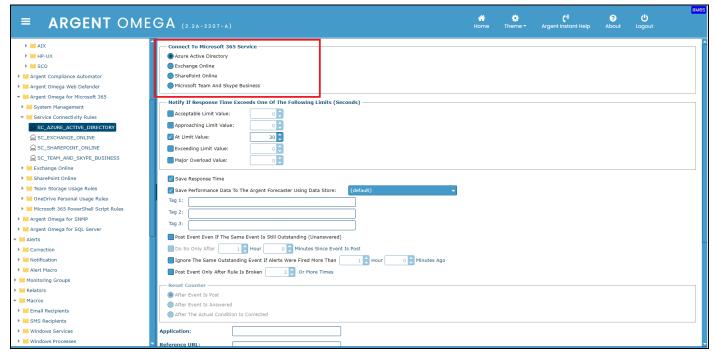


Similarly configure other Rules and test the Rule before adding to the Relator.

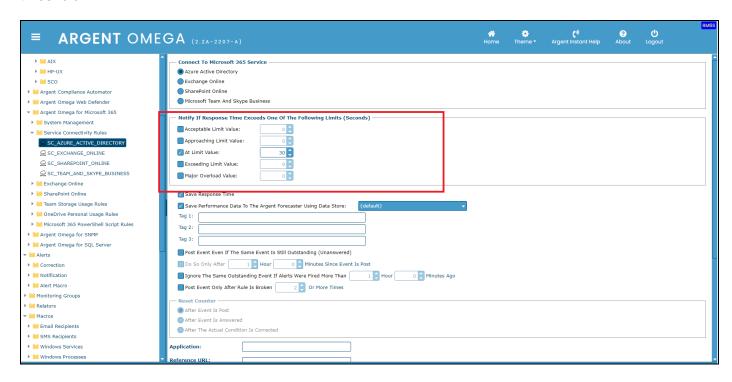
Service Connectivity Rules

This set of Rules monitors the availability and performance of the following Microsoft 365 services:

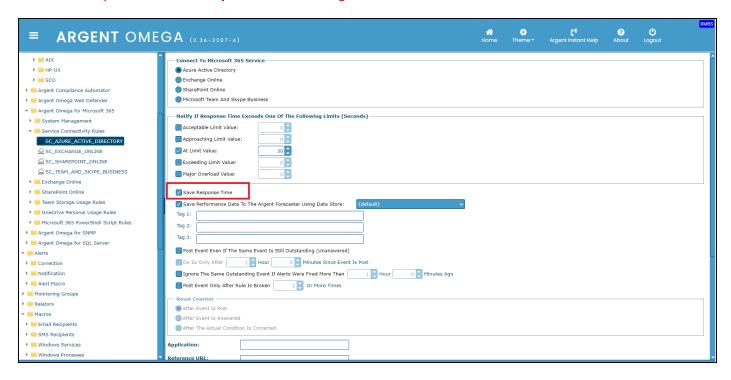
- Azure Active Directory
- Exchange Online
- SharePoint Online
- Microsoft Team And Skype Business



In **Notify If Response Time Exceeds One Of The Following Limits (Seconds)** section, specify the Response Time threshold. The Rule will alert if any service's Response Time exceeds the specified threshold.

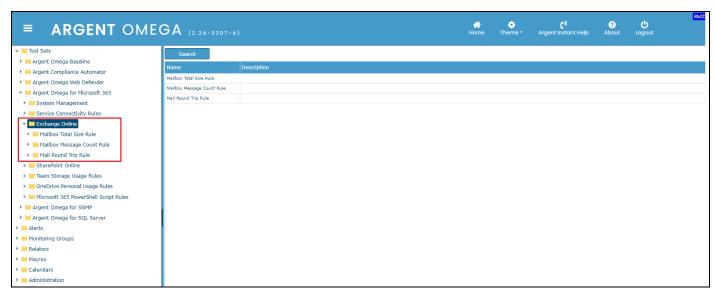


There is an option to **Save Response Time** to Argent Forecaster:



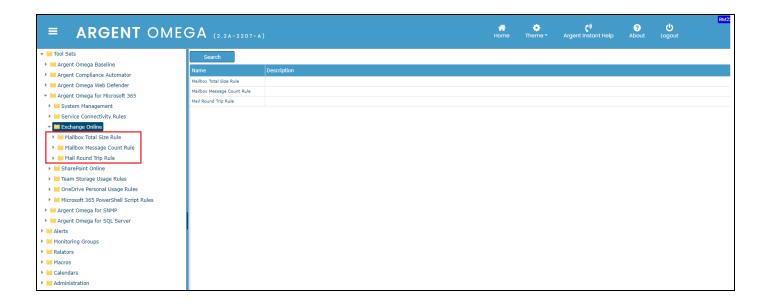
Exchange Online Rules

Exchange Online is part of the Microsoft 365 suite of products. Argent Omega provides built-in Rules to monitor the critical performance metrics of Exchange Online services.



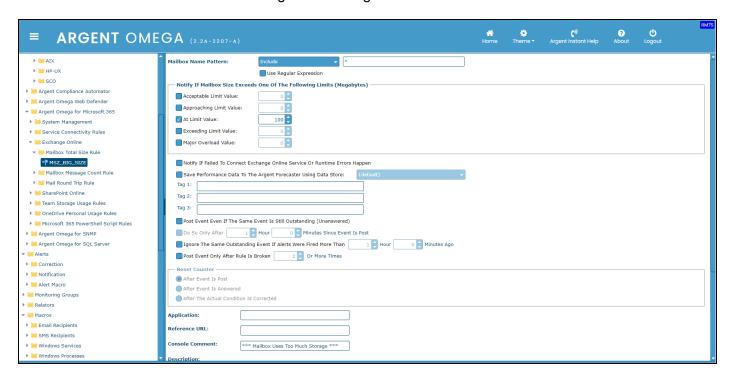
In the Exchange Online section, you will find these three sets of Rules:

- Mailbox Total Size Rule
- Mailbox Message Count Rule
- Mail Round Trip Rule

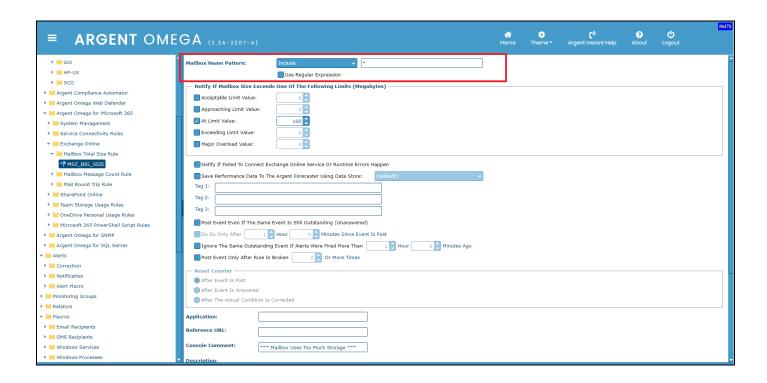


Mailbox Total Size Rules

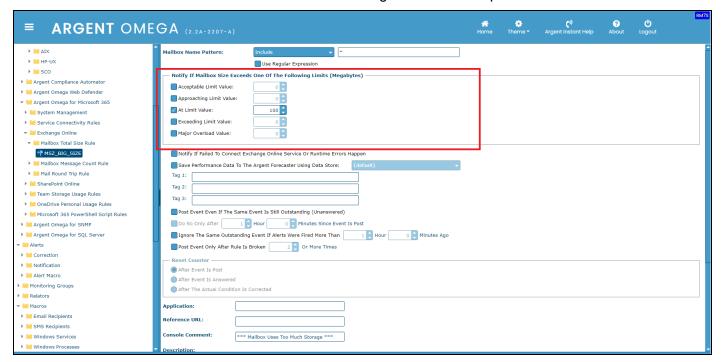
This Rule monitors the mailbox size usage of Exchange Online service.



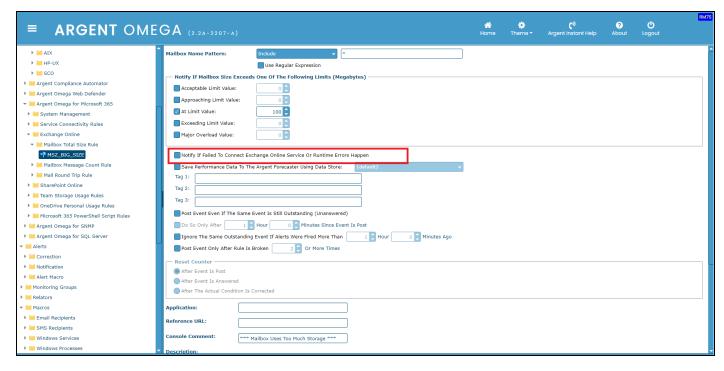
Include or Exclude Mailbox pattern. There is an option to **Use Regular Expression** in Mailbox Name Pattern.



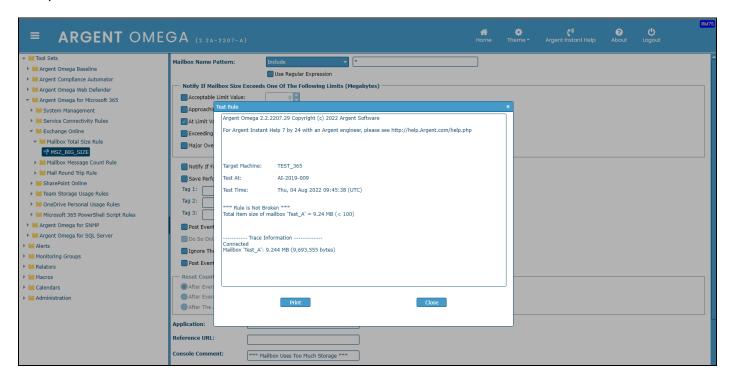
In Notify If Mailbox Size Exceeds One Of The Following Limits (Megabytes) section, specify the Mailbox Size threshold. The Rule will alert if the size usage exceeds the specified threshold.



Check the option **Notify If Failed To Connect Microsoft 365 Service Or Runtime Errors Happen** to fire an Alert when connection failure or runtime errors occur.

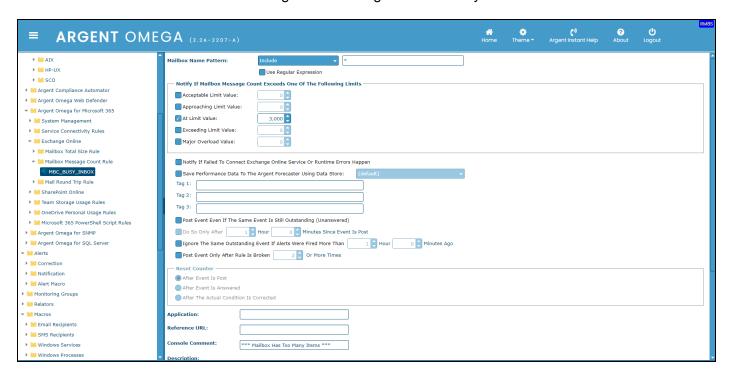


Sample Rule execution result:

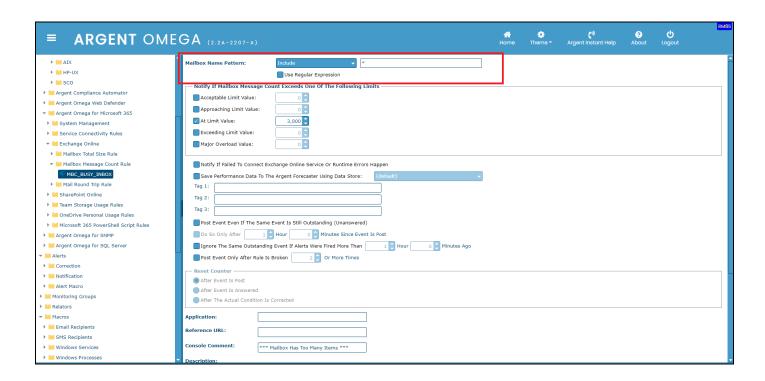


Mailbox Message Count Rules

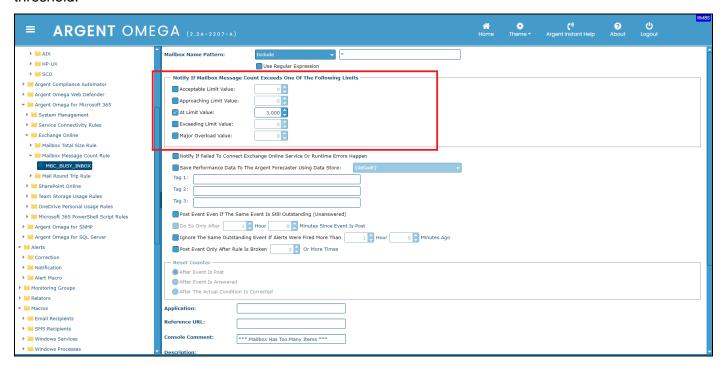
This Rule monitors the number of messages in Exchange Online facility mailbox.



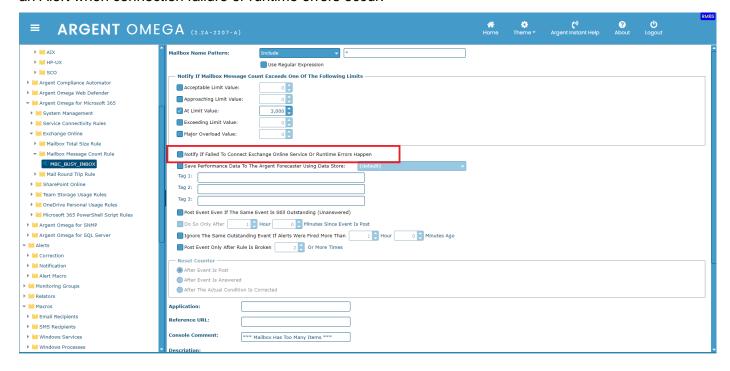
Include or Exclude Mailbox pattern. There is an option to **Use Regular Expression** in Mailbox Name Pattern.



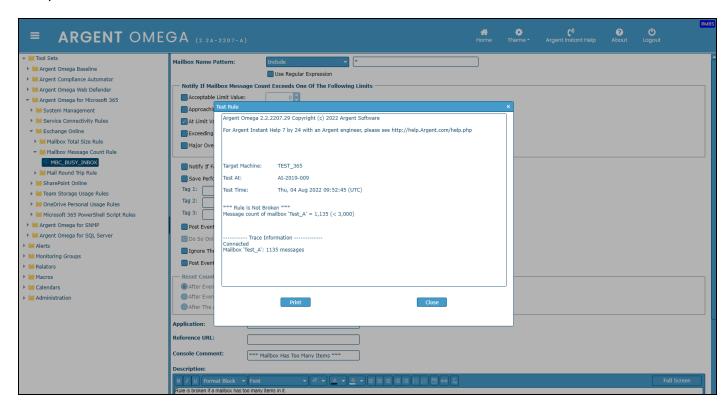
In **Notify If Mailbox Message Count Exceeds One Of The Following Limits** section, specify the Mailbox Count threshold. The Rule will alert if the number of messages in the mailbox exceeds the specified threshold.



Check the option **Notify If Failed To Connect Microsoft 365 Service Or Runtime Errors Happen** to fire an Alert when connection failure or runtime errors occur.

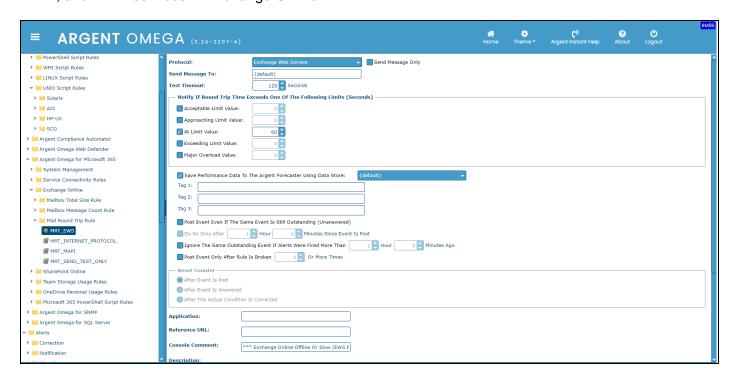


Sample Rule test result:

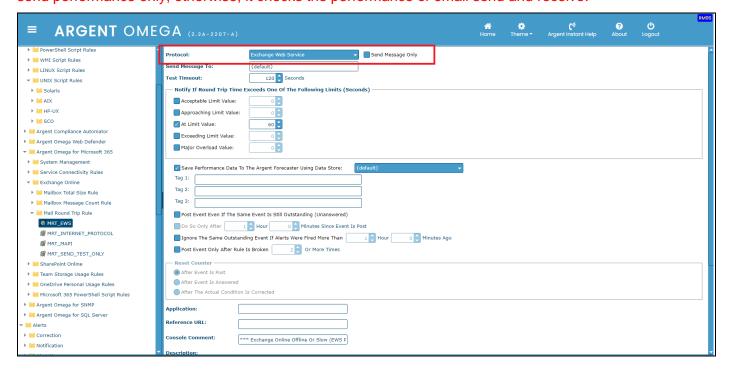


Mail Round Trip Rules

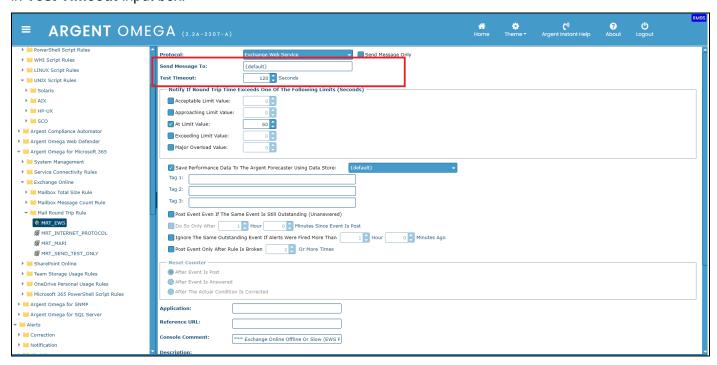
This set of Rules monitors the email sending and receiving performance of Exchange Web Service, SMTP, IMAP, and MAPI services in Exchange Online.



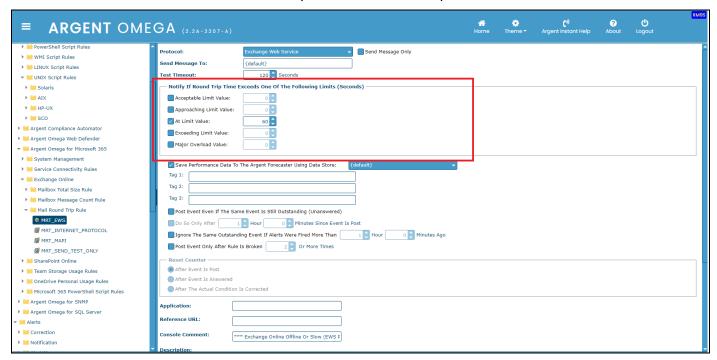
Choose the **Protocol** option for mail service. If **Send Message Only** box is checked, Rule checks email send performance only; otherwise, it checks the performance of email send and receive.



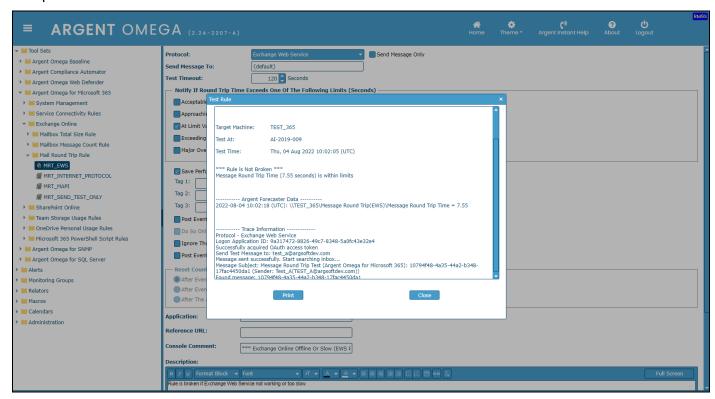
Specify the email address to receive the message and specify the timeout to test. The default value in **Send Message To** field uses the Administrator account specified in CMDB-X. Specify the timeout seconds in **Test Timeout** input box.



In **Notify If Round Trip Time Exceeds One Of The Following Limits** block, specify the Round Trip Time threshold. The Rule will alert if the Round Trip Time exceeds the specified threshold.

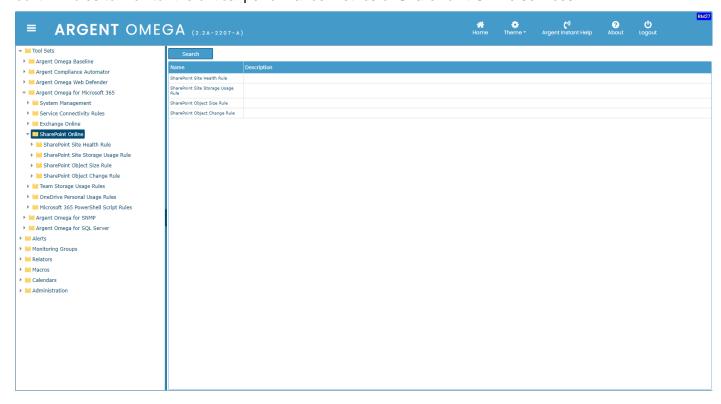


Sample Rule test result:



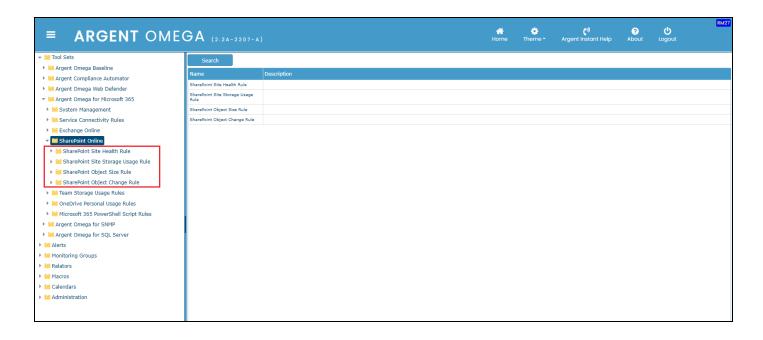
SharePoint Online Rules

SharePoint is a cloud-based facility that helps organizations share and manage content, knowledge, and applications. SharePoint Online is part of the Microsoft 365 suite of products. Argent Omega provides built-in Rules to monitor the critical performance metrics of SharePoint Online services.



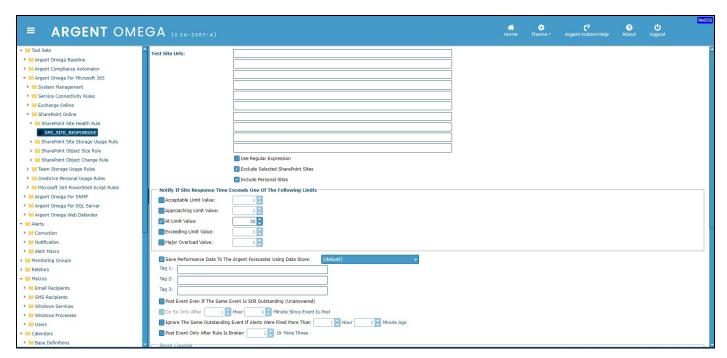
In SharePoint Online section, there are four sets of Rules, namely:

- SharePoint Site Health Rule
- SharePoint Site Storage Health Rule
- SharePoint Object Size Rule
- SharePoint Object Change Rule

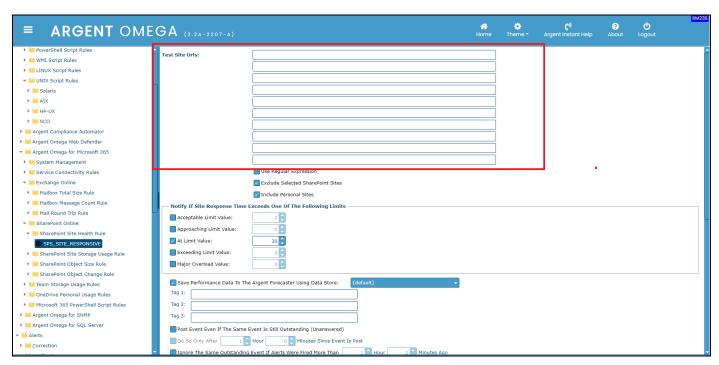


SharePoint Site Health Rules

This Rule monitors the availability and response time of SharePoint Web Sites.

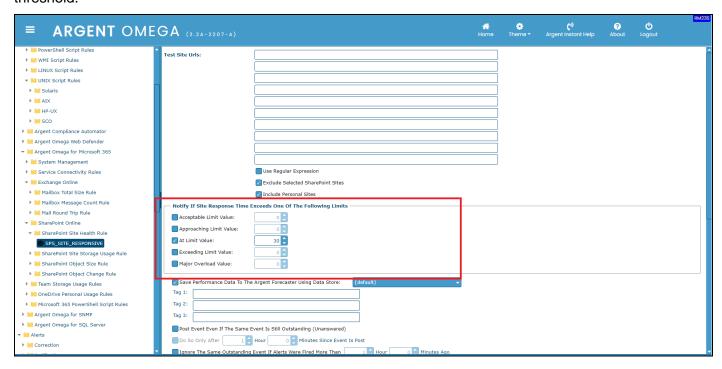


We can specify up to **10 SharePoint sites** in a Rule.

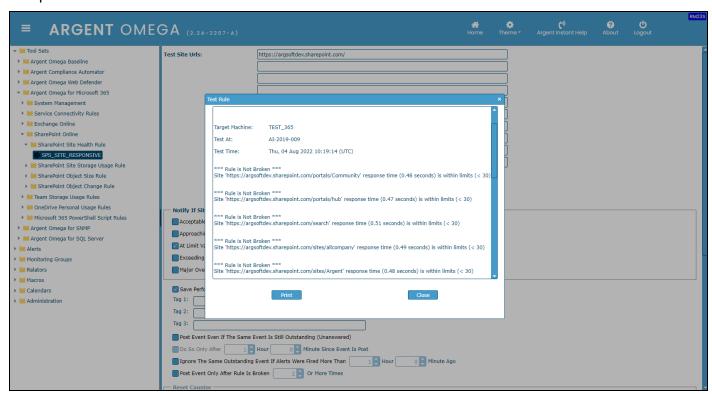


It is possible to Use Regular Expression in site URL, thereby monitoring all URLs that match the expression. There are also options to **Exclude Selected SharePoint Sites** and **Include Personal Sites**.

In **Notify if Site Response Time Exceeds One Of The Following Limits** block, specify the Response Time threshold. The Rule will alert if the Response Time of any specified URL exceeds the specified threshold.

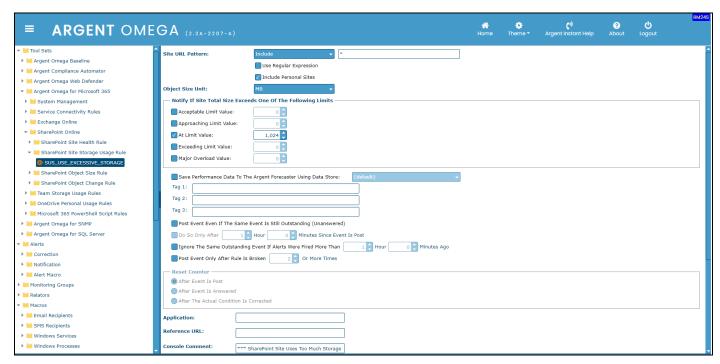


Sample Rule result:

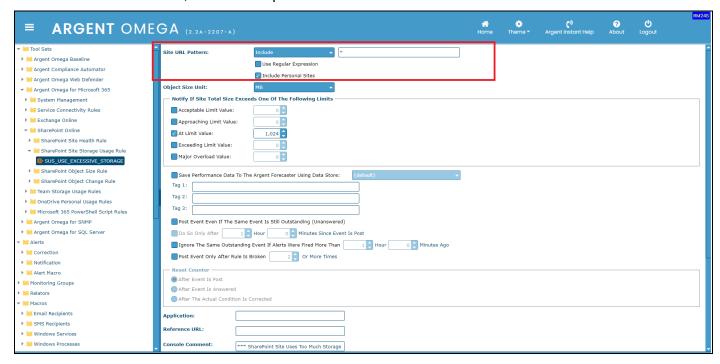


SharePoint Site Storage Health Rules

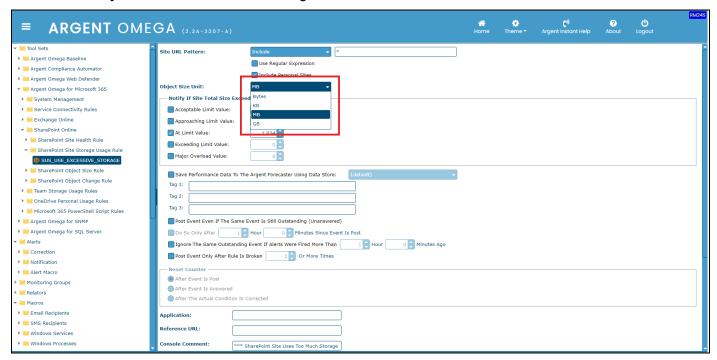
This Rule monitors the storage usage of the specified SharePoint site URL.



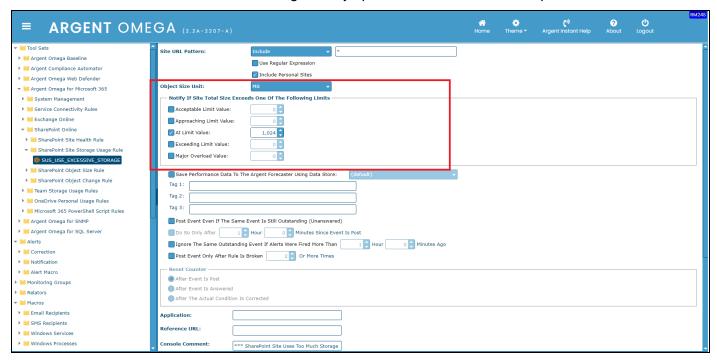
Exclude or Include SharePoint site URL patterns. There is an option to **Use Regular Expression** in SharePoint site URL. Also, there is an option to **Include Personal Sites**.



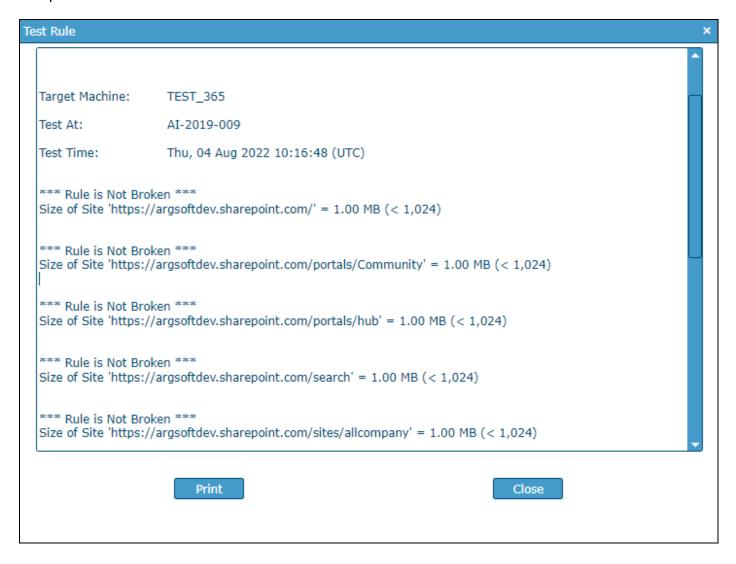
Choose the **Object Size Unit** to monitor usage.



In **Notify If Site Total Size Exceeds One Of The Following Limits** section, specify the Total Size threshold. The Rule will alert if the size usage of any specified URL exceeds the specified threshold.

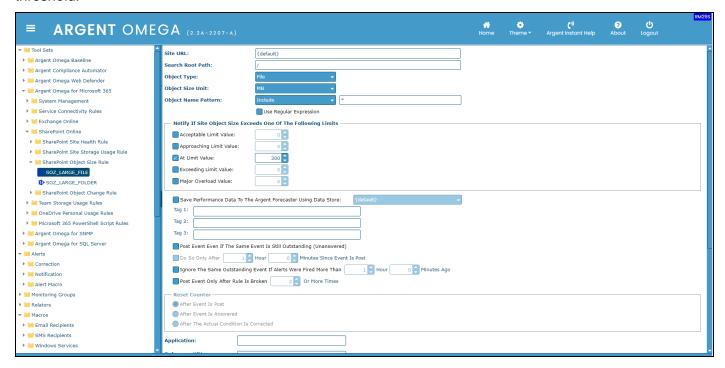


Sample Rule result:

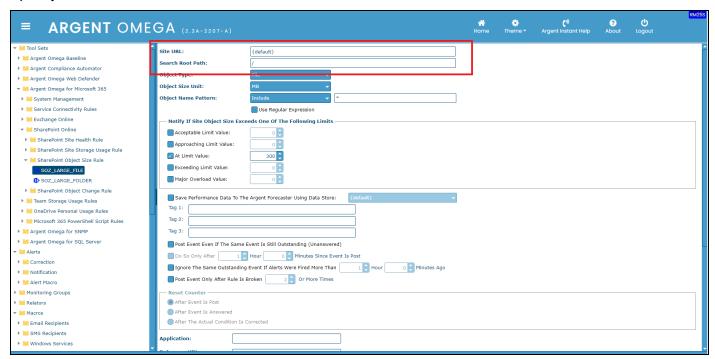


SharePoint Object Size Rules

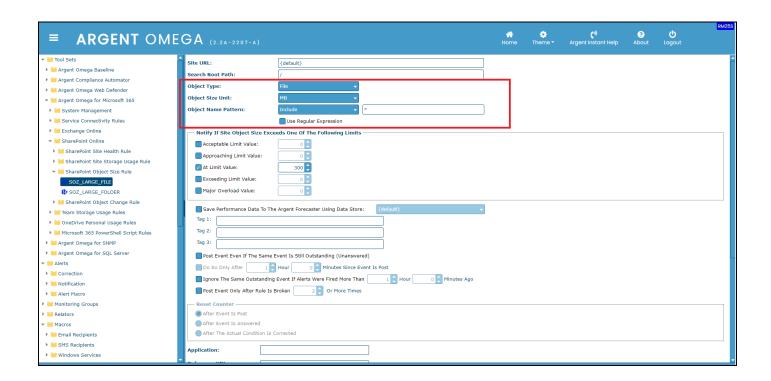
This Rule alerts if the size of any File or Folder in a specified SharePoint site exceeds the specified threshold.



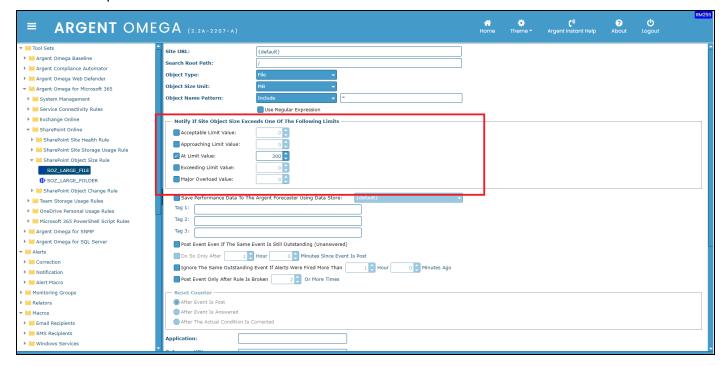
Specify the Site URL and Search Root Path.



Select the **Object Type** (Either File or Folder) and **Object Unit.** Specify the **Object Name Pattern**. There is an option to **Use Regular Expression** in the object name.

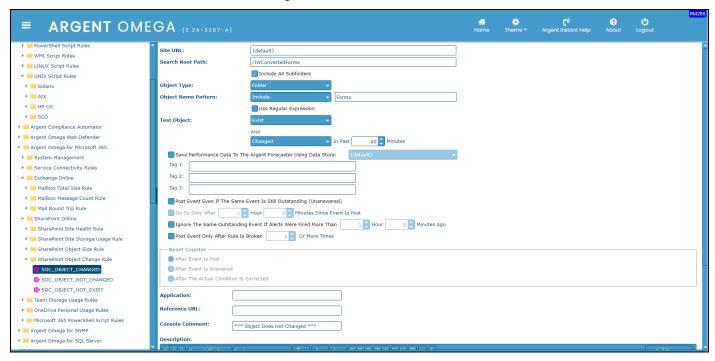


In **Notify If Site Object Size Exceeds One Of The Following Limits** block, specify the Object Size threshold. The Rule will alert if any object that matches the pattern in the specified SharePoint site exceeds the specified threshold.

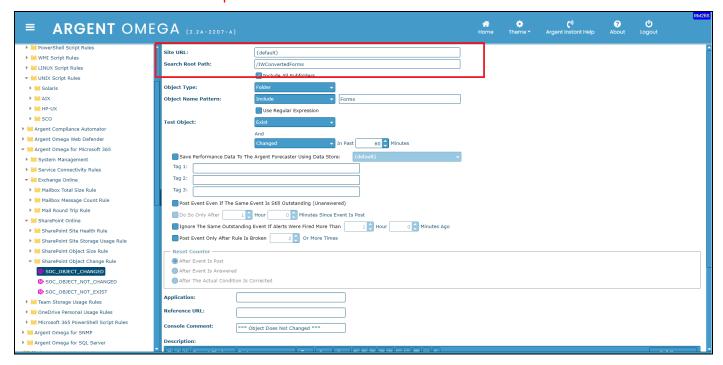


SharePoint Object Change Rules

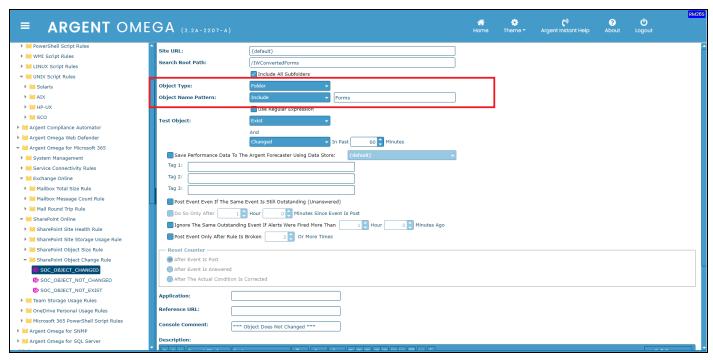
This Rule monitors the File or Folder changes in a SharePoint site.



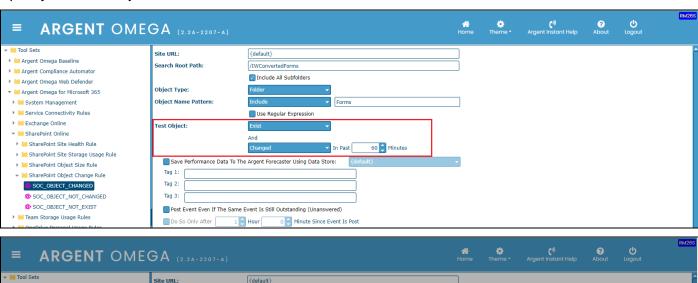
Specify the **Site URL** and **Search Root Path**. Selecting the option **Include All Subfolders** extends the search to the subfolders of the specified root folder.

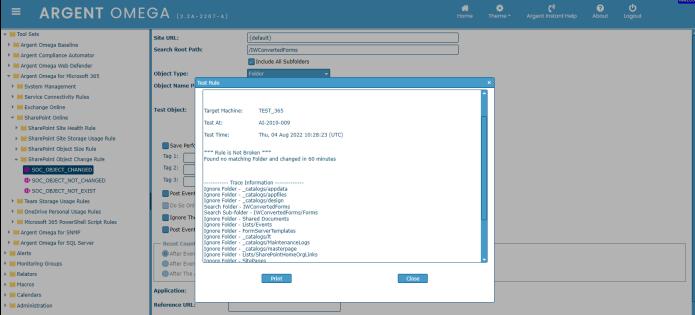


Select the **Object Type**; it can be either File or Folder. Specify the **Object Name Pattern.** There is an option to **Use Regular Expression** in the Object Name.



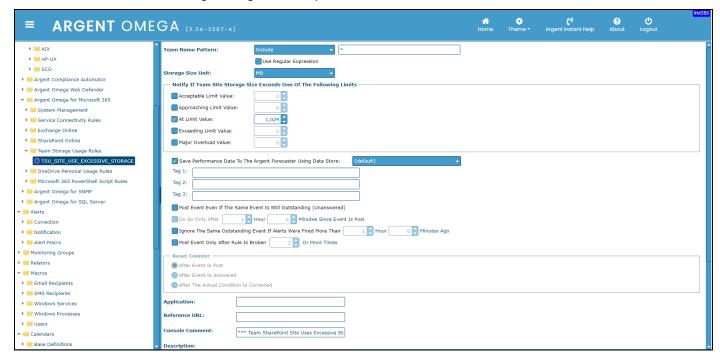
Specify the Test Object criteria. The Rule will alert if the condition is satisfied.





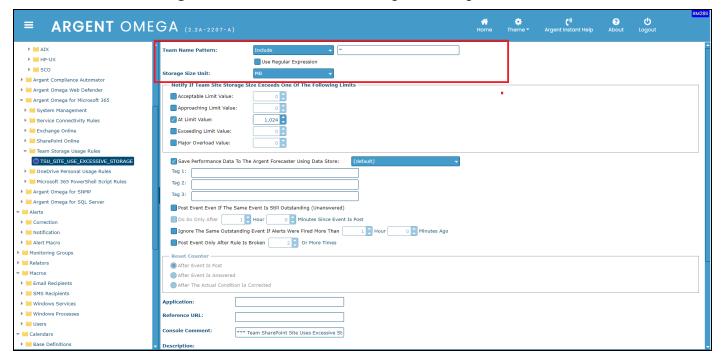
Team Storage Usage Rules

This Rule monitors the Storage Usage of the specified Team SharePoint sites.

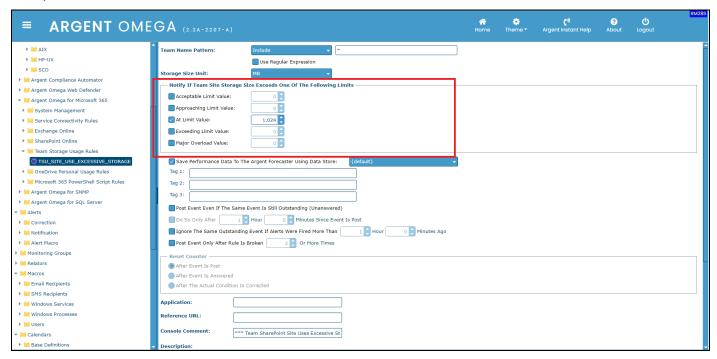


Include or Exclude Team Name pattern. There is an option to Use Regular Expression in the Team

Name. Choose the Storage Size Unit to monitor the storage size usage.

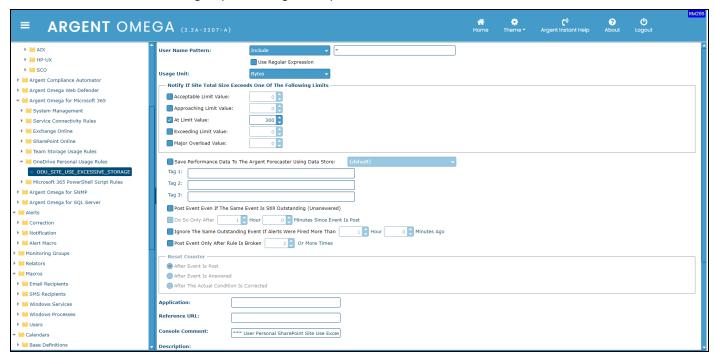


In **Notify If Team Site Storage Size Exceeds One Of The Following Limits** block, specify the Team Site Storage Size threshold. The Rule will alert if the specified Team SharePoint site's storage usage exceeds the specified threshold.

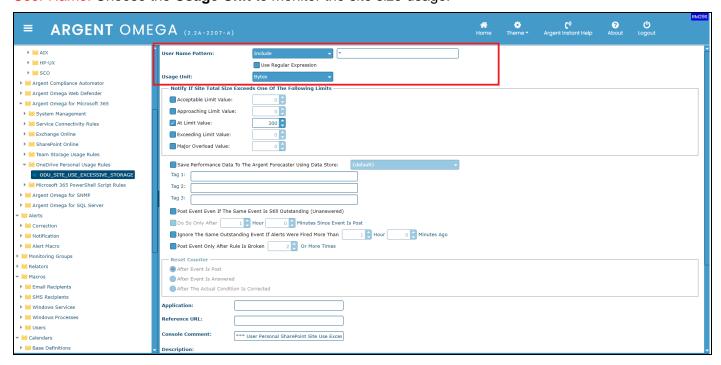


OneDrive Personal Usage Rules

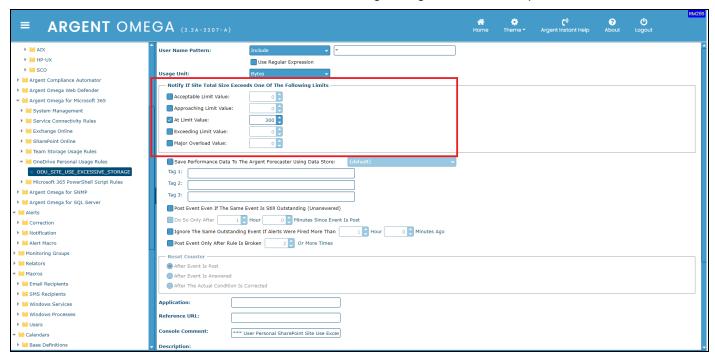
This Rule monitors the storage space usage of a personal SharePoint site.



Include or Exclude OneDrive User Name Pattern. There is an option to Use Regular Expression in the User Name. Choose the Usage Unit to monitor the site size usage.

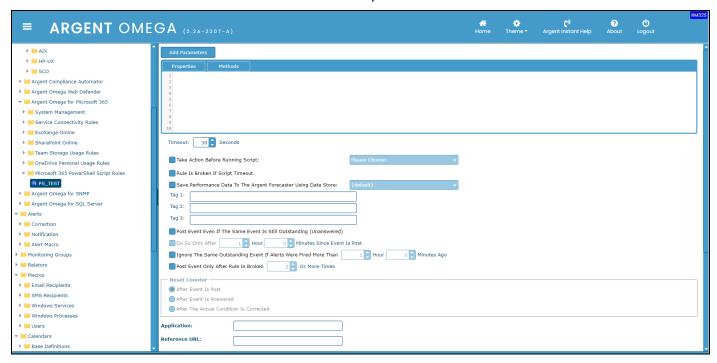


In **Notify If Site Total Size Exceeds One Of The Following Limits** block, specify the Site Total Size threshold. The Rule will alert if the OneDrive cloud storage usage exceeds the specified threshold.

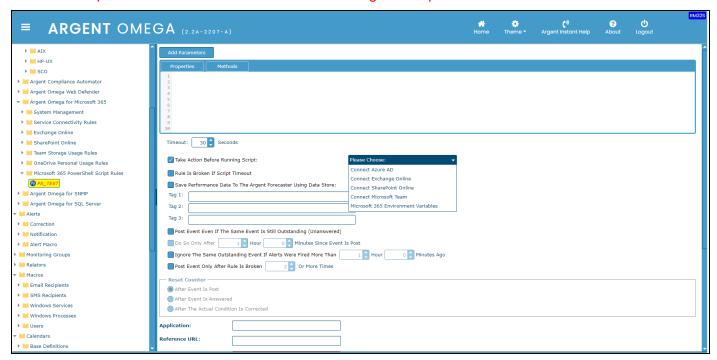


Microsoft 365 PowerShell Script Rules

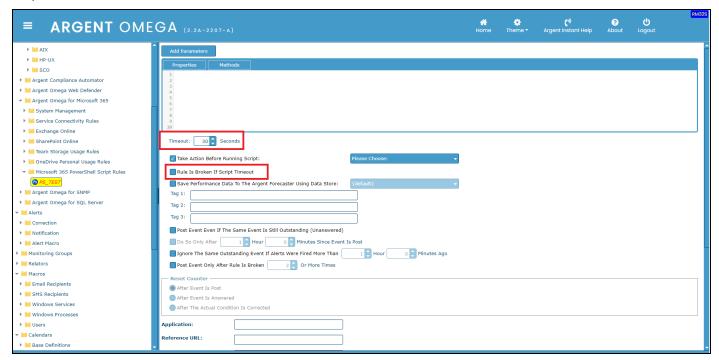
This Rule allows the creation of custom PowerShell scripts to monitor Microsoft 365.



There is an option to take selected action before running the script.



Specify the Script **Timeout** and check **Rule Is Broken If Script Timeout** option that the Rule will break on a specified timeout.



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