**Microsoft**® **– .NET CLR**® **Content Pack**

* **Overview:**

VMware vRealize Log Insight delivers automated log management through log analytics, aggregation and search, extending VMware’s leadership in analytics to log data. The Microsoft® .NET CLR® content pack provides a set of dashboards, pre-defined extracted fields, queries and alerts which can be imported to any instance of Log Insight to provide easier to read and more organized monitoring to administrators. It gives you a convenient overview of the major parameters of MS .NET CLR events.

* **Highlights**:
  + Organized and simplified log analysis for .NET CLR events
  + Logically grouped widgets for easier readability and monitoring.
  + Pre-defined alarms to alert and enable early resolution of problems.
  + Query notes for each dashboard widget includes information about the widget with links to documentation, knowledge base articles, and any other information making it possible to understand the data presented.
* **Description:**

The .NET Framework provides a run-time environment called the common language runtime (CLR), which runs the code and provides services that make the development process easier.

The content pack for Microsoft® .NET CLR® with **5 dashboards, 34 widgets, 1 query widget** provides you with information about .NET CLR ETW events including various tasks and alarms.  
The content pack covers the following:

* + **General overview:**  
    The widgets in this dashboard describe event tracing for Windows (ETW) events. Each event has an associated keyword and level, which are described in the [CLR ETW Keywords and Levels](http://msdn.microsoft.com/en-us/library/ff357720(v=vs.110).aspx) topic. It covers various events grouped by ETW keyword along with various exception, loader and security events. The dashboard has an additional query widget which lists queries that provide more information about the CLR events.
  + **Detailed analysis of Garbage Collection, Runtime Information, Contention and Thread Pool Events:**

The content pack has 4 dashboards with a total of 26 widgets which give you a detailed analysis of these various ETW events.

* **Tech Specs:**
  + **Compatibility:**

### .Net CLR (Framework 4.5, 4)

* + **Installation**
    - Navigate to the "Content Pack" menu in Log Insight. Select the "Import Content Pack" button. In the "Import Content Pack" menu, do the following:
    - Select the "Browse..." button and select the content pack you are trying to import
    - Select the "Install as content pack" radio button
    - Select the "Import" button

Alternately, you can also install the content pack from the marketplace available on Log Insight UI

* + - On Log Insight UI, browse to Content Pack ->Marketplace
    - Click on the content pack and then click ‘Install’
  + **Configuration:** 
    - **Script - *ms\_clr\_event\_logging.ps1***
      * Copy the scripts directory from the root of the archive downloaded from Solution Exchange to a permanent location. *For example: C:\ProgramData\VMware\Log Insight Agent\dotNetClr\*.
      * Create a task in Windows Task Scheduler to execute the PowerShell scripts bundled in the scripts directory with the following configurations:

1. Run as user with sufficient permissions
2. Browse to **Control Panel --> All Control Panel Items --> Administrative Tools --> Task Scheduler and click on create task**.
3. Set to: Run whether user is logged on or not
4. Set to: Run with highest privileges
5. Action is set to: Start a program
6. Program: *C:\ProgramData\VMware\Log Insight Agent\dotNetClr\scripts\open\_powershell.cmd*
7. Add arguments/Parameters: *ms\_clr\_event\_logging.ps1*
8. Start in: *C:\ProgramData\VMware\Log Insight Agent\ dotNetClr \scripts\*
9. Trigger is set to Daily
10. Repeat task every 5 minutes for the duration of 1 day
11. Set to: Enabled

Note: The duration of the task can be set as per the actual environment.

* + - **liagent.ini configuration:**
      * **Using Agent Group:**

The  **"Microsoft - .NET CLR"**  content pack requires the use of the Log Insight agent with the cfapi protocol (default) and the included agent group configuration. To apply the agent group configuration:  
  
\* Go to the  **Administration -> Management -> Agents**page (requires Super Admin privileges)  
\* Select the  **All Agents** drop-down at the top of the window and select the  **“Copy Template”** button to the right of the "**Microsoft - .NET CLR**" agent group  
\* Add the desired filters to restrict which agent receive the configuration (optional)  
\* Select the "Refresh" button at the top of the page  
\* Select the "Save Configuration" button at the bottom of the page