DataTron - the Relativity Data Grid PowerShell installation script

Data Tron is a PowerShell script that installs Relativity Data Grid on remote servers.

The DataTron PowerShell script is public open source and constantly evolving.

GetHub Download link for DataTron PowerShell: DataTron PowerShell download

The download is only the PowerShell script used to install Relativity Data Grid.

The DataTron package itself is available from kCura Client Services. You must be kCura client with a valid Relativity Data Grid license to obtain the DataTron package which includes Relativity Data Grid.

Definitions:

Node: A machine that will run elastic search and will be part of the production cluster or the monitoring cluster. The node must have PowerShell installed.

Command Center: The machine from which this script is run. It must have PowerShell installed.

Configuration Run: A run of the script to create a Config.psd1 file to be used by as Install Run.

Install run: A run of the script with intent to install Relativity Data Grid to a node.

Shield Web Server: The Relativity web server which the production cluster use for shield authentication.

Create the Command Center.

1.) Unzip the **DataTron** Folder provided by kCura Client Support on a root drive of the Command Center.

2.) Unzipped the **kibana-4.5.4-windows** folder into the newly created DataTron folder. This package can be downloaded here: Kibana Download

3.) Copy the certificate used by the Shield web server it must be in the form of a **.cer file** into the **elasticsearch-main** folder in the **RelativityDataGrid** folder in the **DataTron** folder.

4.) Add a valid **JDK 8 installer** into the elasticsearch**-main** folder in the **RelativityDataGrid** folder in the **DataTron** folder.

5.) Check the execution policy for the Command Center using, Get-ExecutionPolicy. If the execution policy is restricted it must be changed to remote signed using. Set-ExecutionPolicy RemoteSigned.

Do a configuration Run.

The configuration run is kicked off by opening PowerShell as an administration, navigating to the DataTron folder and running the following command:

.\Run-DataTron6.0.ps1 -Config

The configuration requires the following information:

> The service account username and password.

> A name for the Production node.

> A name for the monitoring node (optional: enter blank to skip).

> The names of all nodes that will be in the production array this will be Master(s), Data(s), and Client(s).

> You will specify the minimum numbers of masters. Should be an odd number. https://www.elastic.co/guide/en/elasticsearch/reference/2.3/modules-node.html#split-brain

> A Data path must be added for each type of node. For example, c:\data, f:\DataGrid, g:\relativitydatagrid\data, etc. This is a local drive.

> The name of all Primary and Distributed SQL servers in the Relativity Environment. This is a comma separated list. Do not include Invariant.

> The Shield Web Server (see above definitions). This must be the name that will correspond with the name on the certificate added during creation of the Command Center.

Do installation Runs.

A good order of operations to do the install runs in is as follows:

Production cluster Master node(s).

Monitoring cluster Monitoring node.

Production cluster Data node(s).

Production cluster Client node(s).

Example syntax:

.\DataTron\Run-DataTron.ps1 -Config

This will create a Config.psd1 file in the directory for and install run.

This is a switch and cannot be run with any other parameters.

Once a Config.psd1 file is created the script can be used to do an install run.

.\DataTron\Run-DataTron.ps1 -driveLetter c -machineName nodename -IsMaster $true

The above will install DataGrid to the drive letter c on the machine named nodename and will make the node a monitoring node for the production cluster. It is not a member of the production cluster.

.\DataTron\Run-DataTron.ps1 -driveLetter g -machineName nodename2 -IsMonitor $true

The above will install DataGrid to the drive letter g on the machine named nodename2 and will make the node a production master node.

.\DataTron\Run-DataTron.ps1 -driveLetter c -machineName nodename3 -IsData $true

The above will install DataGrid to the drive letter c on the machine named nodename3 and will make the node a production data node.

.\DataTron\Run-DataTron.ps1 -driveLetter c -machineName nodename3 -IsClient $true

The above will install DataGrid to the drive letter c on the machine named nodename3 and will make the node a production client node.

.\DataTron\Run-DataTron.ps1 -driveLetter c -machineName someserver -IsMaster $true -dontInstallJava -dontCopyfolders

Does an install run but does not install Java and does not copy the installation folders. Both switches can be used or either one singly.

.\DataTron\Run-DataTron2.ps1 -driveLetter d -machineName datanode1 -IsData $true -dontCopyFolders -dontInstallJava

The above will install Data Grid on driver letter d on machine name datanode1 and make it a data node. it will not attempt to copy folders or install java.

Note: The longest sections of the script are the Install of Java and the copying of folders. If the script needs to be re-run due so errors, there are switches to stop reinstall of java or recopying of the folders.

Note: You can use one or both switches if needed.

Note: In the config folder in the RelativityDataGrid folder there is a resetyml.ps1 that will reset the elasticsearch.yml back to default if needed.

You can access the following items to get acquainted with your need Relativity Data Grid cluster.

http://masternodename:9200/_plugin/head

http://monitoringnodename:9200/_plugin/head

http://monitoringnodename:5601

You need to Link Relativity to your newly created cluster.

https://help.kcura.com/9.5/Content/Relativity/Data_Grid/Installing_Data_Grid.htm#Linking

Use the following guide to configure Data Grid.

https://help.kcura.com/9.5/Content/Relativity/Data_Grid/Configuring_Data_Grid.htm

Resistance is not futile!