

IBM Tivoli Netcool/OMNIbus V7.3.1

Configuring WebGUI connections to display layer and aggregation layer ObjectServers



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The purpose of this IBM Tivoli® Netcool/OMNIbus V7.3.1 training module is to provide configuration details on how the WebGUI connects to both display layer and aggregation layer ObjectServers in a multitier system architecture.

Objectives

After completing this training module, you can accomplish these tasks:

- Locate key WebGUI configuration files
- Configure the WebGUI for your multitier system

In this training module, you learn how to locate key IBM Tivoli Netcool/OMNIBus V7.3.1 WebGUI configuration files. You also learn how to configure the WebGUI for a multitier IBM Tivoli Netcool/OMNIBus V7.3.1 system.

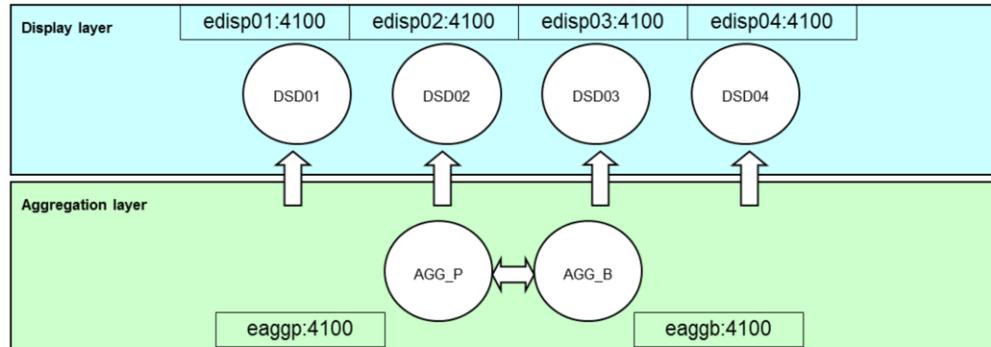
WebGUI overview

The WebGUI of a multitier IBM Tivoli Netcool/OMNIBus system has these characteristics:

- Provides a portal to the events held in the multitier aggregation layer object server
- When a display layer is used, the load from the WebGUI users is spread into the WebGUI read cloud with user Actions are written back to the aggregation layer
- The ncwDataSourceDefinitions.xml file holds details on how the WebGUI interacts multitier architecture Object Servers
- The server.init file defines how WebGUI server resources are configured
- WebGUI can connect to one or more multitier architecture IBM Tivoli Netcool/OMNIBus systems

IBM Tivoli Netcool/OMNIBus architecture can have one layer or three layers. The three-layer configuration is known as the multitier architecture. A multitier IBM Tivoli Netcool/OMNIBus system has three layers: collection layer, aggregation layer, and display layer. Each layer in the multitier architecture has an ObjectServer. In the multitier architecture, the WebGUI provides a portal to the events held within the ObjectServer of the aggregation layer. When a display layer is used, the load from the WebGUI users is spread into the WebGUI read cloud with user actions being written back to the aggregation layer. The ncwDataSourceDefinitions.xml file holds the details on how the WebGUI interacts with the multitier ObjectServers. The server.init file defines how WebGUI server resources are configured. The WebGUI can connect to either one or more multitier IBM Tivoli Netcool/OMNIBus V7.3.1 systems.

Display and aggregation layer hosts and ports



European region

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In this example the WebGUI server needs to be configured to display event data from the European region. Port 4100 is used as the ObjectServer port. Each ObjectServer is hosted on a unique physical host. In this example, host names start with the letter e to denote European. On this slide, you see that there are four display layer ObjectServers. They are used in the WebGUI read cloud.

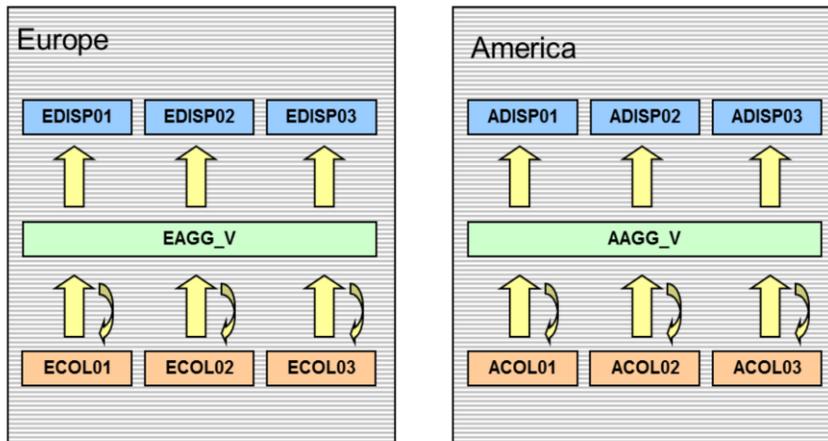
Observe that the two aggregation layer ObjectServers are hosted on two hosts named eaggp and eaggb. In this example, host names are used for simplicity. In practice, either an IP address or a FQDN are used to define hosts.

WebGUI data source configuration

```
<ncwDefaultDataSourceList>
  <ncwDataSourceEntry name="EUROPE"/>
</ncwDefaultDataSourceList>
<ncwDataSourceDefinition type="multipleServerOSDataSource" name="EUROPE" enabled="true">
  <ncwFailOverPairDefinition>
    <ncwPrimaryServer>
      <ncwOSConnection host="eaggp" port="4100" ssl="false" minPoolSize="5" maxPoolSize="10"/>
    </ncwPrimaryServer>
    <ncwBackUpServer>
      <ncwOSConnection host="eaggb" port="4100" ssl="false" minPoolSize="5" maxPoolSize="10"/>
    </ncwBackUpServer>
  </ncwFailOverPairDefinition>
  <ncwReadCloudDefinition>
    <ncwOSConnection host="edisp01" port="4100" minPoolSize="5" maxPoolSize="10"/>
    <ncwOSConnection host="edisp02" port="4100" minPoolSize="5" maxPoolSize="10"/>
    <ncwOSConnection host="edisp03" port="4100" minPoolSize="5" maxPoolSize="10"/>
    <ncwOSConnection host="edisp04" port="4100" minPoolSize="5" maxPoolSize="10"/>
  </ncwReadCloudDefinition>
</ncwDataSourceDefinition>
```

The data source definition file, `ncwDataSourceDefinitions.xml`, is used to define the WebGUI object server configuration. In this example, the European region's object servers are defined as EUROPE. The given XML data is shown, in part, to highlight the main object server definition blocks. The section highlighted in green is for the aggregation object servers, with `eaggp` defined as the `ncwPrimaryServer`, and `eaggb` defined as the `ncqBackUpServer`, within the `ncwFailOverPairDefintion`. The section highlighted in blue is for the display object servers, which are defined as a read cloud using the `ncwReadCloudDefinition`.

Multiple multitier read clouds



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Using the data sources file, you can configure WebGUI to display one or more geographical regions or functional groups of Object Servers. In this example, two regional Object Server multitier systems are depicted. Both can be added to the same `ncwDataSourceDefinitions.xml` to allow access to both using the same WebGUI server. With WebGUI, you can store events in a cache for a specific period to improve performance over wide area networks.

Summary

Now that you have completed this training module, you can accomplish these tasks:

- Identify key WebGUI configuration files
- Configure WebGUI for your multitier system

Now that you have completed this training module, you can locate key IBM Tivoli Netcool/OMNIBus V7.3.1 WebGUI configuration files. You can also configure the WebGUI for a multitier IBM Tivoli Netcool/OMNIBus V7.3.1 system.

Useful reference information

- The main source of information is **Changing data source configurations** in the WebGUI manual
- The main directory for the WebGUI is called TIPHOME
- You can set TIPHOME as an environment variable
- ncwDataSourceDefinitions.xml and server.init are located in the TIPHOME directory
- To locate key configuration files, use the UNIX command **find**
for example, **find \$TIPHOME -name ncwDataSourceDefinitions.xml**

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