Introduction

This Tech Note outlines using FSGateway to transfer data between two different ArchestrA Galaxies.

Application Versions

- Industrial Application Server 2.1 and later
- Wonderware Application Server 3.1
- FSGateway 1.5 SP1

Configuration Details

In order to transfer data between two Galaxies, FSGateway must be used as a protocol converter. FSGateway ArchestrA configuration objects utilize the Message Exchange (MX) protocol to communicate to ArchestrA objects within the Galaxy that the Platform on that same node is a member of. FSGateway can then act as a SuiteLink® server to a remote galaxy's DDESuiteLinkClient object (Figure 1 below).
Galaxy B Configuration

1. Create an Object and an Attribute.

Galaxy B is hosted on Node 2, and named ts-test02 in this example. The galaxy contains a deployed User Defined Object named Node2_UDO with a User Defined Attribute named Tag1 (Figure 2 below).

FSGateway must be installed locally to the node where a Platform from this Galaxy is deployed. In this case, we will install FSGateway on the GR Node (Node 2).

FSGateway should be configured with an ArchestrA and ArchestrAGroup object using the default configuration options (Figure 3 below). In the case where ArchestrA security is enabled, the login information must be entered.

2. Save your changes and activate FSGateway.
Galaxy A Configuration

1. Create an Object and Attribute.

Galaxy A is hosted on Node 1, named ts-test01 in this example. The galaxy contains a deployed User Defined Object named **Node1_UDO** with a User Defined Attribute named **Tag1** (Figure 4 below).

Galaxy A also contains a deployed DDESuiteLinkClient object directed to FSGateway running on Node 2 (Figure 5 below).
2. The DDESuiteLinkClient object has a Topic configured to match the Device Group Name on the ArchestrAGroup object of FSGateway on Node 2 (Figure 6 below).

Run-Time

Once everything is deployed, any change to Node1_UDO.Tag1 will be passed to Node2_UDO.Tag1 and vice versa (Figure 8 below).
FIGURE 8: VALUES LINKED BETWEEN GALAXIES

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