Tech Note 544
Understanding GRAccess Licensing

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Introduction

This *Tech Note* explains the licensing scheme for GRAccess Toolkit and how the license enables a product created using GRAccess to access the Galaxy Repository (GR). This licensing scheme is the same for the versions listed below.

Application Versions

- Industrial Application Server 2.1

- GRAccess Toolkit 2.1

- Wonderware Application Server 3.0

- GRAccess Toolkit 3.0

- Wonderware Application Server 3.1

- GRAccess Toolkit 3.1 SP1

About GRAccess

Wonderware® GRAccess (Galaxy Repository Access) Toolkit provides programmatic access to, and interaction with Galaxy data. You can use the Wonderware GRAccess object model to write programs that automate configuration of local and remote Galaxies, such as auto-generating Templates, or auto-deploying an object.

The utility/program that you create using the GRAccess Toolkit interacts with your Galaxy in a similar way that the IDE interacts with a Galaxy. You can use the the GRAccess Toolkit to provide key capabilities, such as reading and writing configuration data in the Galaxy Repository through a custom application program. You can use Visual Basic, C# or C++ to develop your application. The Toolkit includes sample code and documentation for calling the necessary APIs.

Licensing GRAccess

The GRAccess Toolkit license is a paper license provided via the License Certificate. The License Certificate is created when you order the GRAccess Toolkit and shipped with the product CD. The Toolkit paper license certificate allows you to use the Library of calls and functions to write a utility/program that interfaces with the Wonderware Galaxy.

The utility/program created with the GRAccess Toolkit and run on a Development node with DevGR does not need a soft license. In this case, **DevGR** means that this machine has

- FS Dev License as shown in Figure 1 (below).

- Bootstrap, IDE and Galaxy Repository Features from the AppServer CD installation.

The utility/program created with the GRAccess Toolkit and run on a **ClientNode** requires a soft license. In this case **ClientNode** means that this machine has

- Soft License with feature lines: Dev_IO_Count, IDE_Runtime and Dev_Session_Count

- Only Bootstrap and IDE Features installed

When you run a utility/program created with the GRAccess Toolkit using a Remote Desktop (RDP) Session, it requires a license file with the **Dev_Session_Count** feature line and consumes one session (Development Studio). This process matches running the IDE, which requires one Dev Session. It is possible for an IDE and a GR program to utilize the same session from the same computer.

Note: if you need to purchase a Development Studio license or a GRAccess license, please contact your local Distributor.

GRAccess Licensing Test Case Scenarios

The following test case scenarios provide functional examples for GRAccess licensing. For testing, the sample GRAccess application is installed using the ArchestrA GRAccess Toolkit CD and **CreateGalaxyExample.exe** is used.

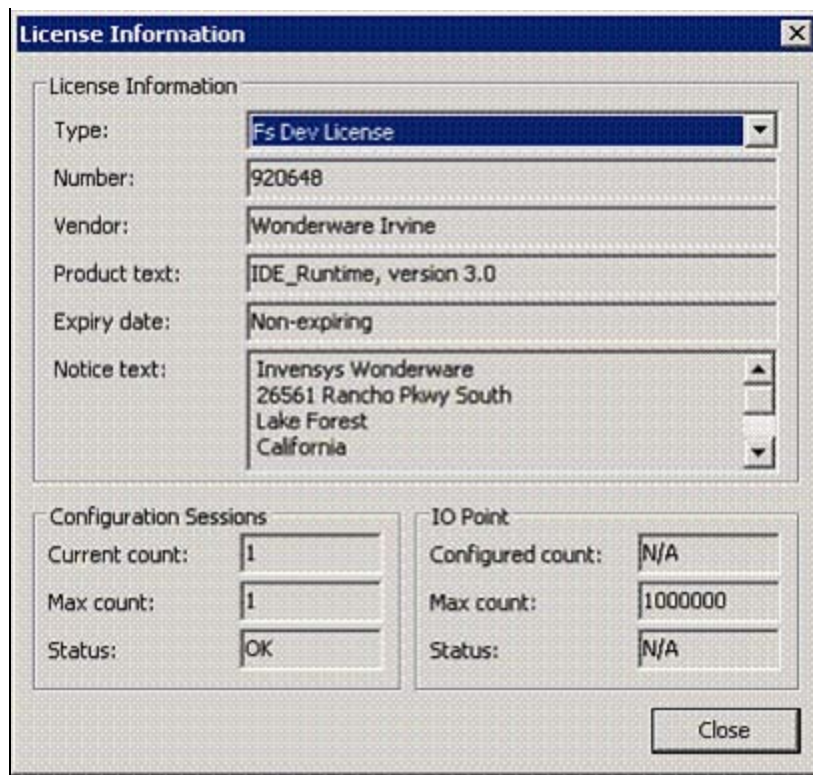The test cases are completed using the following Development license (i. e. **Dev_Session_Count = 1**).

FIGURE 1: LICENSE INFORMATION WINDOW

Note: RDP stands for Remote Desktop Protocol in each instance.

Test Case #	Description	Result
Test Case 1	ArchestrA IDE and GRAccess application both are run simultaneously on DevGR.	Works with above license.
Test Case 2	ArchestrA IDE and GRAccess application both are run simultaneously from a single RDP Session.	Works with above license.
Test Case 3	ArchestrA IDE and GRAccess application both are run simultaneously on 2 different RDP Sessions.	Does NOT work. *See detailed test results below.
Test Case 4	ArchestrA IDE is run on the DevGR and GRAccess application is run from a RDP Session.	Does NOT work. When both are started together, this does not work. When they're started one at a time, it works. *See detailed test results below.
Test Case 5	GRAccess application is run on **ClientNode** and connects through the network to **DevGR**. The ArchestrA IDE and/or the GRAccess Application can be run on the DevGR node.	**DevGR** works with above license. But it also requires additional GRAccess license to be installed on the **ClientNode**. *See detailed test results below

Details for each test case appear in the following section.

Analyzing the Test Cases

In test cases 3 and 4, the ArchestrA IDE and GRAccess applications do not run simultaneously because you should not be able to connect two simultaneous development sessions with a license enabling only one session (**Dev_Session_Count=1**). Dev_Session_Count of **2** is needed since the ArchestrA IDE and GRAccess apps are started from 2 different sessions. You must buy a Development Studio **TSE T** soft license with 2 sessions and a Dev Studio **TSE TP** paper license. With this license, you receive both a new Development Studio license file including **Dev_Session_Count=2** and a Dev Studio paper license for a Dev Studio Session. Install the Dev Studio soft license (Dev_Session_Count=2) on the GR node. Two development sessions will be allowed.

The licensing is based on *number of sessions* used by GRAccess and IDE. Taking this into consideration, in **Test Case 1** and **Test Case 2**, both the GRAccess Application and ArchestrA IDE are started from the same session. Therefore, Dev_Session_Count of **1** is appropriate.

Test Case 3 Details

The ArchestrA IDE and GRAccess applications both are run simultaneously on 2 different RDP Sessions. The RDP sessions could be on the same or different machines.

DOES NOT WORK

In this case, if **CreateGalaxyExample.exe** is run first, the IDE does not run and the following message is generated:

FIGURE 2: CONNECTION COUNT LICENSE ENFORCEMENT

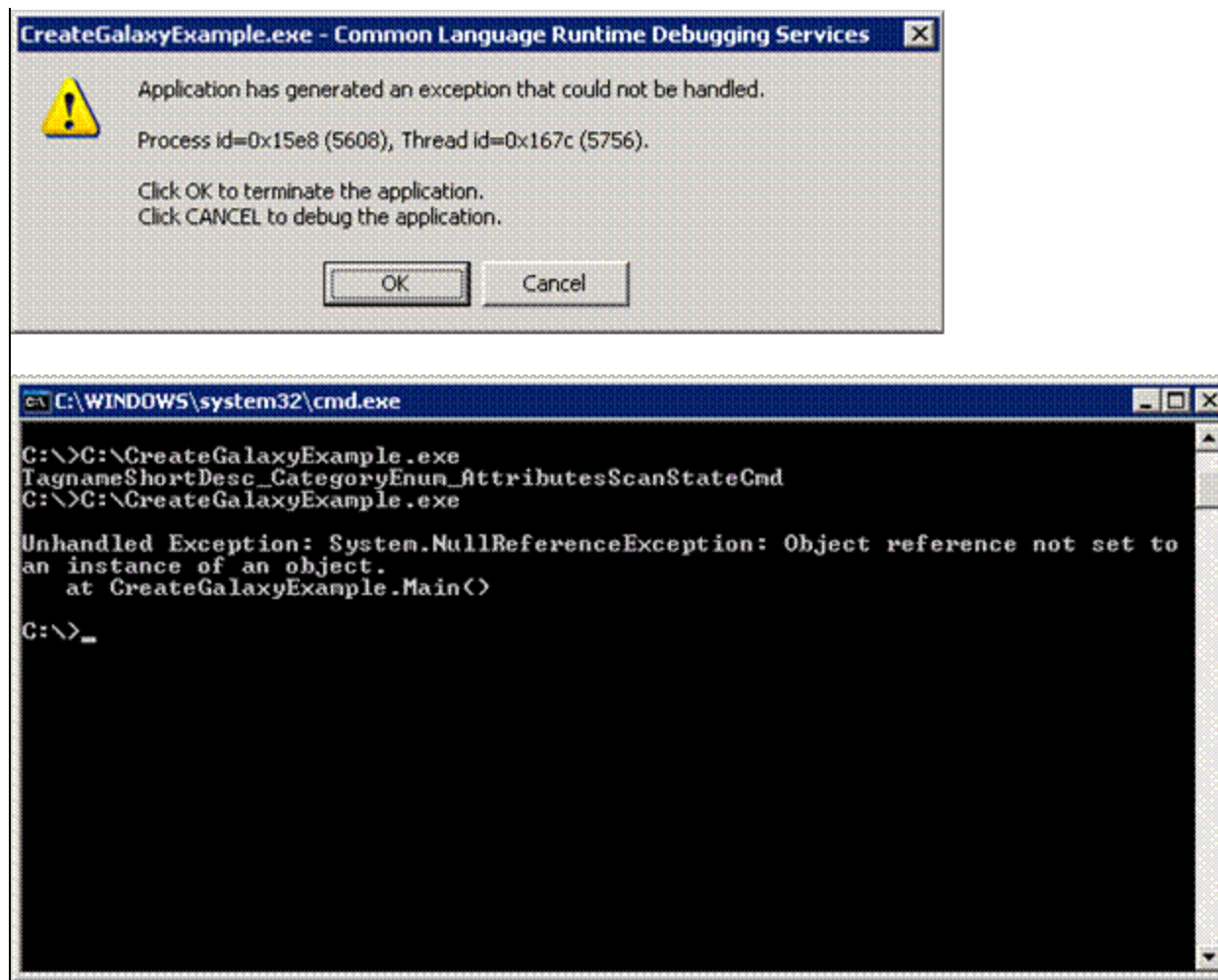If the IDE is run first, and then **CreateGalaxyExample.exe**, the following message is generated:

FIGURE 3: EXCEPTION WHEN RUNNING CREATEGALAXYEXAMPLE.EXE

Test Case 4 Details

The ArchestrA IDE is run on the DevGR and the GRAccess application is run from a RDP Session.

DOES NOT WORK

In this case, if **CreateGalaxyExample.exe** is run first, from an RDP Session, and then the ArchestrA IDE run on the DevGR, the following error message is generated:

FIGURE 4: CONNECTION COUNT LICENSE ENFORCEMENT FOR TERMINAL SERVICES RDP

If the ArchestrA IDE is run on the DevGR first, and then **CreateGalaxyExample.exe** in run in an RDP Session, following error message is generated.
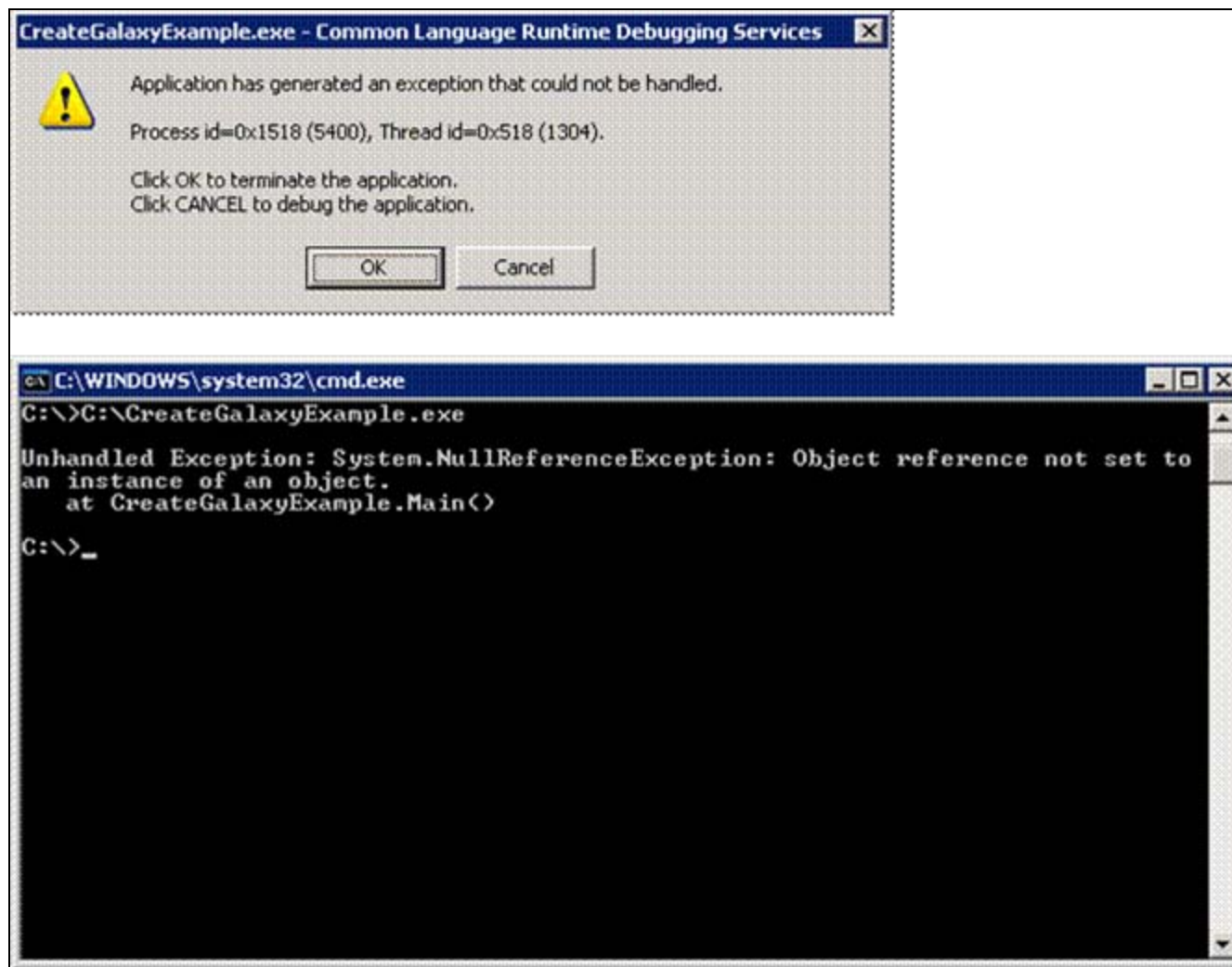

FIGURE 5: RDP EXCEPTION

Test Case 5 Details

A GRAccess application that runs on **ClientNode** and connects to **DevGR** requires the following:

- A soft license consisting of 3 feature lines: **Dev_IO_Count**, **IDE_Runtime** and **Dev_Session_Count**.

- The **ClientNode** should also have the Bootstrap and ArchestrA IDE installed.

With this **ClientNode** setup, it can run more than one GRAccess Applications. The **DevGR** with FSDev license (as shown in Figure 1) may also run ArchestrA IDE and/or the GRAccess Application.

References

You can view documentation for GRAccess Toolkit on the Wonderware Developer Network (WDN) in the Support Library **Documentation Section** under Toolkits. The same documentation is also available on the installation CD for the ArchestrA GRAccess Toolkit.

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For technical support questions, send an e-mail to **support@wonderware.com**.

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