# Oracle GoldenGate 12c: Troubleshooting and Tuning

## **Gathering Evidence**

- Acquiring confidence using the standard Oracle GoldenGate tools normally used to interact with the software:
- GGSCI
- Error Logs, Process Reports, Discard File, System Logs
- Competently using the tools mentioned above to gather evidence about alleged issues occurring to an Oracle GoldenGate environment

### Oracle GoldenGate Troubleshooting Tools

- Accessing knowledge Documents Mailing lists, Oracle GoldenGate forums, etc.
- Consulting the Documentation
- Getting familiar with the ShowSyntax parameter
- Getting familiar with the logdump utility

### **Basic and Startup Problems**

- Getting familiar with basic problems
- Developing the ability to deal with Extract and Replicat startup issues
- Verifying file names, file permissions, consistency between Extract and Replicat group names and their supporting files
- Verifying consistent naming convention when defining trail files and their reference in the Extract/Replicat parameter files
- Verifying that the correct software version has been installed
- Verifying that the Oracle GoldenGate manager is running, that the group name which fails to start exists and is not misspelt
- Verifying that the parameter file exists, has the same name as the Extract/Replicat group, and is accessible by Oracle GoldenGate
- Introducing the use of CHECKPARAMS to verify that the parameter syntax is correct

#### **Data Extraction Problems**

- Developing the ability to deal with and troubleshoot data extraction issues:Extract is slow -Extract abends - Data pump abends
- Analyzing various causes of a slow Extract startup
- Tracing may be enabled, activity logging may be enabled, many columns listed in tables being replicated
- Introducing the use of the CacheMgr parameter to control the virtual memory and temporary disk space that are available for caching uncommitted transaction data
- In-depth analysis of abending Extracts: is Extract unable to open the transaction logs? Checking to see if the disk is full -Is an archive log missing?

- In-depth analysis of abending data pumps: Does the data pump abend with error number 509 ("Incompatible record")?Have the source tables been changed? Is the Extract abending due to data manipulation?
- Was the primary Extract or the data pump stopped, re-added, or restarted without resetting the data pump's read position in the local trail?

### **Data Replication Problems**

- Developing the ability to deal with and troubleshoot data replication issues:
- Analyzing the various causes of a "stuck" Replicat: Does "Stats Replicat" return no statistics? Do successive "Info Replicat" commands indicate that the Replicat read checkpoint is not moving?
- Verifying that the Replicat is reading the trail to which Extract is writing
- Analyzing the reasons why a Replicat abends: Is Replicat unable to locate a trail? Is Replicat unable to open a trail file? Was "Add TranData" issued for each table?