

After 25 incidents occur for the same problem key in one day, subsequent incidents for this problem key are flood-controlled.

7.1.3 Fault Diagnosability Infrastructure Components

The fault diagnosability infrastructure consists of several components, including the Automatic Diagnostic Repository (ADR), various logs, trace files, the Enterprise Manager Support Workbench, and the ADRCI Command-Line Utility. An execution context identifier (ECID) is a globally unique identifier used to tag and track a single call through the Oracle software stack, for example, a call to Oracle Fusion Middleware that then calls into Oracle Database to retrieve data. Consistent diagnostic data formats across products and instances, and a unified set of tools enable customers and Oracle Support to correlate and analyze diagnostic data across multiple instances. When a single call has failures on multiple tiers of the Oracle software stack, problems that are generated are tagged with the same ECID so that they can be correlated. The ECID is typically generated in the middle tier and is passed to the database as an Oracle Call Interface (OCI) attribute. The database, Oracle Automatic Storage Management (Oracle ASM), the listener, Oracle Clusterware, and other Oracle products or components store all diagnostic data in the ADR.

Other ADR Contents

In addition to files mentioned in the previous sections, the ADR contains health monitor reports, data repair records, SQL test cases, incident packages, and more.

Enterprise Manager Support Workbench

The Enterprise Manager Support Workbench (Support Workbench) is a facility that enables you to investigate, report, and in some cases, repair problems (critical errors), all with an easy-to-use graphical interface. Note: Because all diagnostic data, including the alert log, are stored in the ADR, the initialization parameters `BACKGROUND_DUMP_DEST` and `USER_DUMP_DEST` are deprecated.

Related Topics

Structure, Contents, and Location of the Automatic Diagnostic Repository

The Automatic Diagnostic Repository (ADR) is a directory structure that is stored outside of the database.

7.1.2.3 Related Problems Across the Topology

For any problem identified in a database instance, the diagnosability framework can identify related problems across the topology of your Oracle Database installation.

DDL Log

The data definition language (DDL) log is a file that has the same format and basic behavior as the alert log, but it only contains the DDL statements issued by the database.

Debug Log

An Oracle Database component can detect conditions, states, or events that are unusual, but which do not inhibit correct operation of the detecting component.

ADRCI Command-Line Utility

The ADR Command Interpreter (ADRCI) is a utility that enables you to investigate problems, view health check reports, and package first-failure diagnostic data, all within a command-line environment. They are replaced by the initialization parameter `DIAGNOSTIC_DEST`, which identifies the location of the ADR. In an Oracle RAC environment, a related problem could be identified in any database instance or Oracle ASM instance on any other node. A problem is related to the original problem if it occurs within a designated time period or shares the same execution context identifier.

Automatic Diagnostic Repository (ADR)

The ADR is a file-based repository for database diagnostic data such as traces, dumps.

Attention Log

The attention log is a structured, externally modifiable file that contains information about critical and highly visible database events.

7.1.3.1 Automatic Diagnostic Repository (ADR)

The ADR is a file-based repository for database diagnostic data such as traces, dumps, the alert log, health monitor reports, and more. For example, in an Oracle Real Application Clusters environment with shared storage and Oracle ASM, each database instance and each Oracle ASM instance has an ADR home directory. With Oracle Clusterware, each

host node in the cluster has an ADR home directory. In these cases, the database writes a message to the alert log indicating that no further incidents will be recorded. It has a unified directory structure across multiple instances and multiple products. ADR's unified directory structure.