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The New Oracle Enterprise Manager Database Control 11g Release 2 – Now Managing Oracle Clusterware

ORACLE

Introduction

Oracle Enterprise Manager provides a single, integrated solution for testing, deploying, operating, monitoring, diagnosing, and resolving problems in today's complex IT environments. It delivers enhanced manageability and automation for your grid, reducing the cost of managing today's modern data centers.

Oracle Enterprise Manager comes in two versions. Oracle Enterprise Manager Grid Control is a centralized management solution, delivering enhanced manageability and automation for your grid across both Oracle and non-Oracle technologies to reduce the cost of managing today's modern data centers. Oracle Enterprise Manager Database Control is a decentralized management console, dedicated to manage Oracle Databases.

With the new version of Oracle Database 11g Release 2 Oracle Enterprise Manager Database Control provides a new cluster management tool, available with Oracle Real Application Clusters Databases, allowing the management of all resources deployed in an Oracle Clusterware 11g Release 2 based grid.

The New Oracle Enterprise Manager Database Control

Oracle Enterprise Manager (EM) Database Control extends the idea of a centralized cluster management and brings it to a new level. Starting with Oracle Clusterware 11g Release 2, Oracle EM Database Control can be used to manage the cluster and all its resources – applications and databases – as a whole. This functionality will be adapted in Oracle Enterprise Manager Grid Control as soon as the new release of Oracle Enterprise Manager Grid Control is available.

Using Oracle EM Database Control, however, requires at least one cluster-aware database to be installed in the cluster. This database does not need to be running to perform some resource-related operations in the cluster. Nevertheless, full access to all cluster operations will only be possible, if the database that is used by Oracle Enterprise Manager Database Control is online.

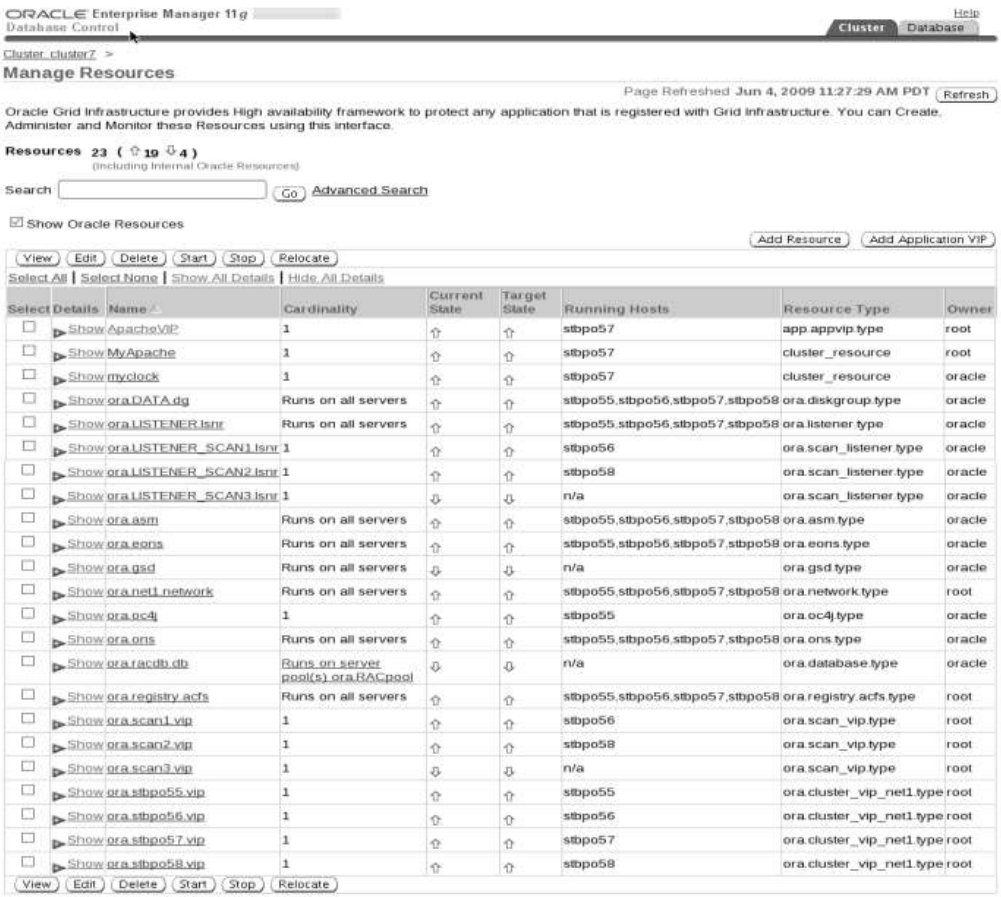

Figure 1: Resource Overview in Oracle Enterprise Manager Database Control

Managing All Kinds of Applications in the Cluster

All kinds of applications and processes can be monitored and managed by Oracle Clusterware as resources in the cluster. Resources can either run as so called local resources on every node in the cluster, providing infrastructure components. Alternatively, they can be defined as cluster resources, in which case they manage an application in a failover manner.

Non-Oracle applications must be managed using the CRSCTL tool. Oracle Enterprise Manager (EM) database control, however, can be used to manage all types of resources in the cluster.

Oracle Clusterware 11g Release 2 makes it easier than ever to register an application so it can be managed using Oracle Clusterware. All that is required are four steps, including a failover test:

1. Create an Application Specific Action Script or Individual Agent
2. Create an Application VIP to access the Application
3. Configure and Register the Application with Oracle Clusterware
4. Check Start / Stop of the Application & Finalize

Oracle Enterprise Manager supports each of these steps for an easy, centralized deployment. Figure 3 for example shows the dialog that supports adding a resource to the cluster. This includes the action script creation and the registration of the resource.

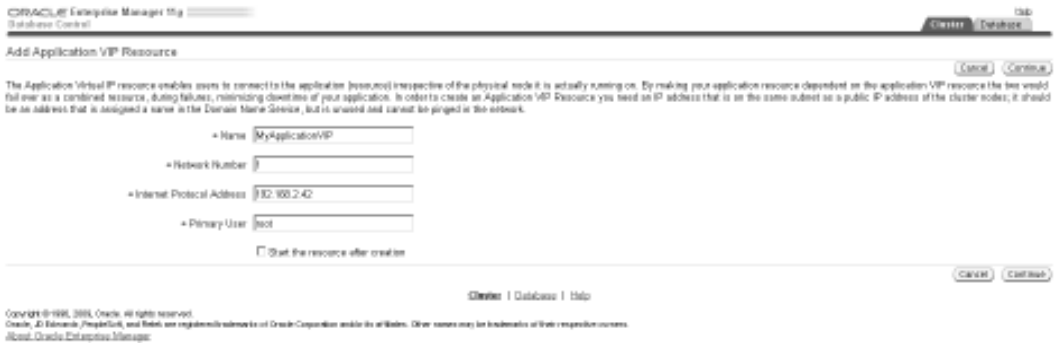

Figure 2: Application specific VIP Creation using Oracle EM

Other dialogs support the Application-VIP creation or the relocation of a resource between servers in the cluster. Most of the cluster related management operations can be performed even, when the database assigned to the Oracle Enterprise Manager Database Control is down.

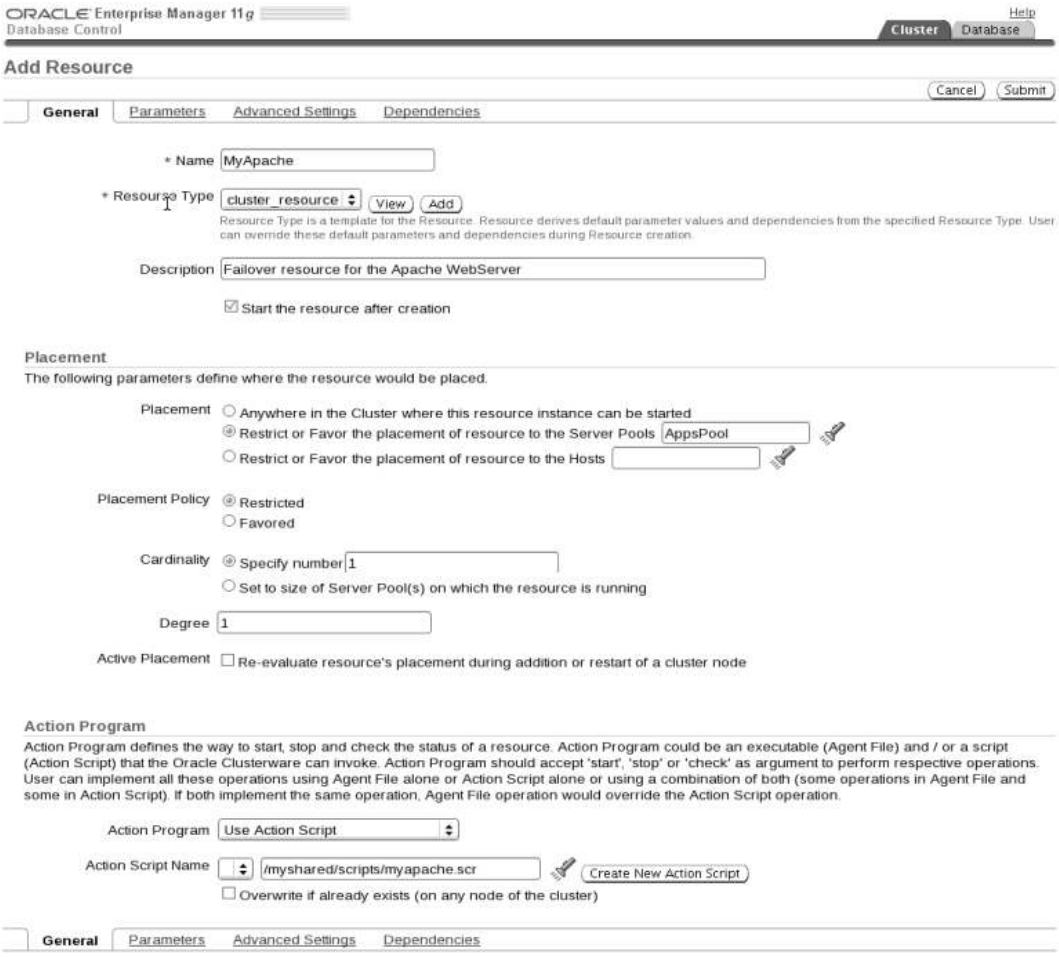

Figure 3: Adding a resource to the cluster using Oracle Enterprise Manager

Conclusion

Managing large grids, independent of the number of deployed applications can appear to be a challenge. Oracle Clusterware overcomes these challenges. Using Oracle Enterprise Manager Database Control as a standardized and integrated management tool, Oracle Clusterware now manages all applications in a grid as if they were running on a single system, providing improved availability, scalability, and flexibility.

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