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Recovery Assistant

Product Description

The Problem

Complexity

Many people assume that mirrored DASD can be reconfigured ‘at the touch of a button’ for DR Testing or for use following a Disaster. The reality is very different; it takes a long sequence of commands to reconfigure DASD and usually, thousands of devices are involved, some of which may be in some exception or error state at the time the commands are issued.

Using a manual approach, a simple mistake can put all enterprise data at risk.

Lack of Familiarity

Operations Staff, who may be completely at home running ‘business as usual’ functionality, tend to be far less comfortable managing a DR-Test or dealing with the fallout of a real disaster because it isn’t something they do every day.

Ironically, it is not unknown for organizations to corrupt or lose Production Data because of a mistake made *during a DR Test*, perhaps due to keying errors or attempts to resolve exceptions ‘on-the-fly’.

The Solution - Recovery Assistant

Recovery Assistant is a suite of programs used to control EMC DASD (R1, R2 and BCVs) and the RDF Communications Link making up a mirrored DR solution. Ongoing *Monitoring* of the mirrored solution is also available in a related functionality called OverSite.

Figure 1, below, shows Recovery Assistant implemented in a Primary Site/Recovery Site configuration. This diagram also shows the available OverSite functionality, implemented in its site monitoring role. Figure 2 shows the runtime flow, while Figure 3 shows detail of Recovery Assistant’s ‘Detect and Correct Wizard’ which respond to errors and exceptions.

Key Recovery Assistant Features

Rules Based Configuration

During a DR Test or a Recovery, Recovery Assistant issues the necessary commands to change the status of the hardware. It uses simple, intuitive, ‘rules based’ parameters to help control test and recovery scenarios. It monitors the state of hardware and can respond to error conditions, unexpected hardware status etc. and take alternative logic paths as scenarios unfold.

A key component of the design is that the appropriate response to exceptions can be decided upon *in advance, during set-up and testing*, rather than on-the-fly under the pressure of a DR-Test or during a real recovery. Operations & DR Staff maintain control – choosing when to have

Recovery Assistant respond automatically and when to have it hand back control allowing manual procedures to take over.

Recovery Assistant can be configured, on a *case-by-case basis* to correct any exceptions/errors it finds. Responses can include:

- Correcting the error
- Taking an alternate logic path
- Kicking off an *external* process or JCL to correct the problem
- Outputting an Alert Message and Recovery Instructions to allow manual procedures to be started.

Simulation Mode

Recovery Assistant includes a powerful Simulator which is able to provide simulated results during testing, so that *all* logical paths can be executed. This allows for easy testing of difficult to recreate exception and error conditions on hardware.

If new equipment is to be added, new scripts can be built and tested in the Simulator *in advance* of this equipment being installed. This eliminates many of the risks associated with running automation for the first time alongside a working DR solution. Some live testing of the new equipment will still be necessary, but many set-up errors can be eliminated using this approach.

Logging

Recovery Assistant keeps extensive logs which can be used for detailed problem resolution and very importantly, for *Post Mortem Analysis* after a DR Test.

Figure 1 – Recovery Assistant Enterprise Level Implementation

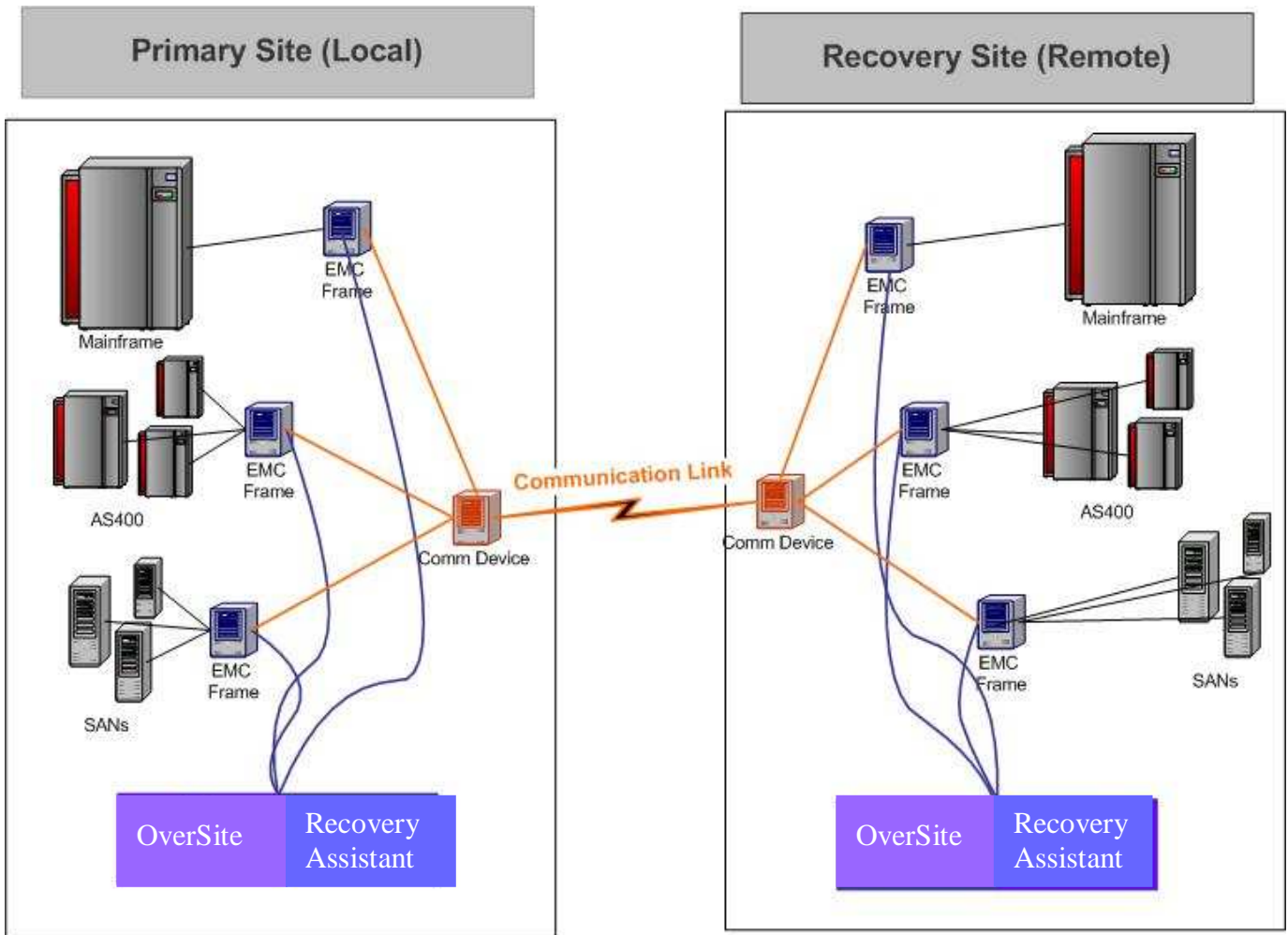


Figure 2 – Recovery Assistant Runtime Flow

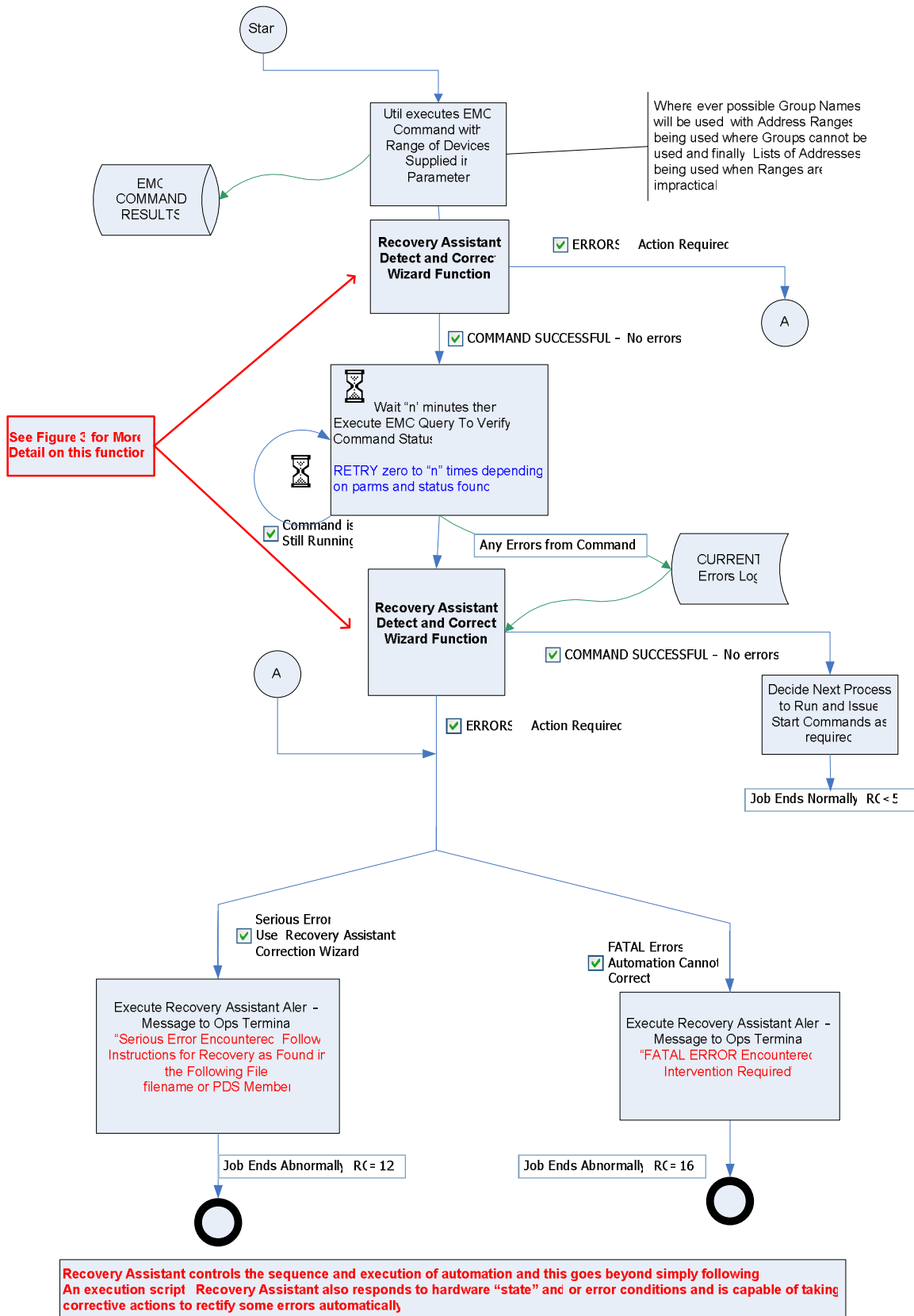


Figure 3 – Detect and Correct Wizard

