The Enterprise Architecture (EA) provides three web sites on the VA Intranet. These sites must be available 24x7. This requires a small-scale EA Continuity of Operations (COOP) environment. VA Information Technology (IT) maintains these web sites at the Falling Waters West Virginia Automation Center. The Center provides physical and network domain maintenance and security. The procedures described below implement server procedures and backups on the two EA servers.

EA Server Maintenance

Maintaining the two Enterprise Architecture servers requires the following:

1. Obtain full administrative privileges on both the Development and Production Server.
2. The Windows servers boot up automatically from the start button (A service provided by operational staff at Falling Waters). Web sites, CaliberRM, and ModelMart applications start automatically at boot time.

Periodic backups are required for CaliberRM and two SQL Server databases, ModelMart and the Baseline System Inventory (BSI). CaliberRM database administration is described in *Chapter 7* of the *Borland CaliberRM User Guide*. A basic description of that procedure in the EA environment follows:

1. Establish a Microsoft Remote Desktop Connection with the Production Server. You must login as the Versant database owner (currently *Administrator*).
2. Backups are located in *C:\CaliberRM_Backup*. The CaliberRM backup files are stored in separate directories labeled in the form "Backup YYYYMMDD". Backups have been retained back to CY2004.
3. Create a new backup directory (e.g., Backup 20060526) in *C:\CaliberRM_Backup*.
4. Open a Microsoft DOS Command Prompt Window on the Production Server.
5. *Cd* to *C:\CaliberRM_Backup* and run command *dbmgr –backup*.
6. This creates a file called *SQMDB.bak* in directory *C:\CaliberRM_Backup*. Move this file to the new backup directory.
7. Copy the file *profile.be* from the directory *C:\Borland\CaliberRMServer\Versant\DB\SQMDB* to the new backup directory.

Backup of SQL Server databases requires the following steps:

1. Establish a Microsoft Remote Desktop Connection with the Production Server.
2. Start the SQL Server Enterprise Manager.
3. Open the Console Root to Microsoft SQL Servers\SQL Server Group\(local) (Windows NT)\Management\SQL Server Agent\Jobs.
4. Currently there are three scheduled database backup jobs: BSIdb Backup, DQS Backup, and eaModelMart Backup. The BSI and DQS backups are scheduled weekly (over the weekend). The ModelMart backup is scheduled daily.
5. Administrators may manually run backups at anytime by selecting "Start Job" from the utility (right-click) menu for the target job.

Restoring a CaliberRM database is a rare process, but it is a little involved as the following steps demonstrate (Assume the name of the database to be restored is *SQMDB*):

1. Establish a Microsoft Remote Desktop Connection with the Production Server. You must login as the Versant database owner (usually *Administrator*).
2. Open a DOS Command Prompt window. Change directory to C:\CaliberRM_Backup.
3. Run command *dblist* to ensure that the current database owner is the same as you current login.
4. Verify that the current database version is the same as the database that created the backup.
5. Ensure that this folder contains a copy of the source backup file (SQMDB.bak in this example).
6. Also, be sure that the file *profile.be* in *C:\Borland\CaliberRMServer\Versant\DB\SQMDB* is the same as the profile used to maintain the database being restored. Profiles are maintained with the backup files to ensure a proper match.
7. Run command *dbmgr –stop* to stop the CaliberRM server.
8. Run command *stopdb SQMDB* to stop the Versant database server.
9. Restore the database via command *vbackup –dev SQMDB.bak –restore SQMDB*. The length of time required depends on the size of the database being restored. This Versant command provides clear information on the progress of the restore as well as a final indication of success or failure.
10. Assuming success, restart Versant via *startdb SQMDB*.
11. Restart CaliberRM via *dbmgr –start*.
12. Login to CaliberRM using a proper login to the restored database (note that the backup database contains *all* administrative information, including the login names and passwords. Test the restored database carefully to be sure of success.

Enterprise Utilities Backup

The working EA enterprise utilities are on the Production Drive in *C:\Public\CD.Installations*. Just to be safe, they are replicated on the Development Server in *C:\Public\Secondary Backup\CD.Installations (105 Backup YYYYMMDD)*. The replication size is large (3.92 GB); however, it should be performed when utilities are upgraded or new ones are added.