Backup and Recovery Services

- Receive professional installation and configuration
- Consult to meet specific requirements
- Ensure backup data is verified and recoverable
- Gain peace of mind

Introduction

Protecting digital information helps maintain business continuity and reduce downtime caused by a loss of data. Congratulations! By purchasing Emerson’s Backup and Recovery solution, you have taken one of the first steps to protecting your digital information. However, since resources are normally stretched thin, you may not have the time or the resident skillset to effectively and efficiently implement Backup and Recovery.

The Backup and Recovery Services offer the customer the flexibility of performing their own installation in concert with Emerson’s consultative services or to have their installation and configuration performed by Emerson’s experienced service personnel. Verification and Recovery services provide ongoing confirmation that the Backup and Recovery solution is working as expected.

Emerson’s Backup and Recovery Services delivers peace of mind knowing that the Backup and Recovery solution has been installed, configured and verified by Emerson’s expert service personnel.

Benefits

Receive professional installation and configuration: Save time and effort by having Emerson’s trained service personnel install and configure your Backup and Recovery. You can be assured that your Backup and Recovery installation is functioning at peak performance and that all of your backed-up data is recoverable in the event of an emergency.

Consult to meet specific requirements: Some customers have the ability and the staff to perform the installation, but some “do-it-yourselfers” may require a little guidance. Emerson’s consultation service provides the direction and expert advice to install and configure Backup and Recovery.

Ensure backup data is verified and recoverable: Your backed-up data is verified that it was backed up and is recoverable at the completion of the Backup and Recovery installation. Additionally, a verification health check can be performed at any time during the ownership period of the Backup and Recovery solution.

Gain peace of mind: If disaster strikes, you will have peace of mind knowing that an effective disaster-recovery plan is available, allowing you to confidently recover your data quickly, easily and with a minimum of process downtime.
Service Description

Emerson’s Backup and Recovery Services provides expert consultation, implementation, verification, and recovery support for Emerson’s Backup and Recovery product.

The services are offered at various levels to accommodate different customer needs. For example, some customers prefer to have implementation of an entire solution done by Emerson while others only require consultation to get them started. To allow for this flexibility, each installation of Backup and Recovery Services is quoted through your local Emerson representative.

Backup and Recovery – Implementation Service. This service implements an entire Backup and Recovery solution for customers who are not interested in doing it themselves. This service gets a Backup and Recovery solution in place such that your automation system is regularly backed up and capable of being recovered in the event of data failure. The basic process would be to evaluate needs with the site, create an implementation plan, get equipment and software installed and operating, configure software, and verify proper operations.

Backup and Recovery – Consultation Service. This service is for customers that are interested in doing the Backup and Recovery setup work themselves but still need direction and expert advice on important decisions like topology, data to backup, and configuration settings.

Backup and Recovery – Verification Service. This service periodically verifies that the backup mechanism is properly backing up the system and that the system can be recovered from the backups.

The two principle activities performed are to verify that backups are being performed per the schedule desired by customer and to verify that backups can be properly restored. The first activity can be done by an examination of the vault where the backups are stored.

The second activity requires that the backups be restored and inspected. The service provider will take your backups and utilize either spare hardware (spare server and spare workstation models) or virtual machine equivalents to test restore the image backups and restore individual data backups for each DeltaV™ subsystem (i.e. Continuous Historian, Batch Historian, Event Chronicle, Objectivity, et. al.).

Backup and Recovery – Recovery Service. This service helps customers recover backed-up data and gets the automation system fully operational in the event of a data failure. This service can handle recovering data large or small, from a single file to entire systems.

Ordering Information

This service requires a written scope of work, deliverables, timing and budget. A service request must be received and reviewed by Emerson. Emerson will in turn provide a written proposal to the customer for review and acceptance.

<table>
<thead>
<tr>
<th>Description</th>
<th>Model Number</th>
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<tbody>
<tr>
<td>Backup and Recovery – Implementation Service</td>
<td>Please Contact Your Local Emerson Sales Office</td>
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<tr>
<td>Backup and Recovery – Consultation Service</td>
<td>Please Contact Your Local Emerson Sales Office</td>
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<tr>
<td>Backup and Recovery – Verification Service</td>
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<td>Backup and Recovery – Recovery Service</td>
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</tbody>
</table>
DeltaV Distributed Control System Version and Operating System Compatibility

<table>
<thead>
<tr>
<th>DeltaV DCS Backup and Recovery v3.3</th>
<th>DeltaV v11.3.1, v12.3.1 and v13.3.1</th>
<th>DeltaV v13.3.1 and v14.3</th>
<th>Non-DeltaV Install</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Workstation</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Advanced Server</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

Notes: The backup agents and management server are supported for use on the DeltaV DCS versions running the operating systems as listed in the table above. The backup agents and management server are supported for use on non-DeltaV workstations and servers running the same versions of the operating systems listed in the table above.

Management Server Requirements

**Software.** See the DeltaV System Version and Operating System Compatibility chart for the operating system requirements for using Backup and Recovery on DeltaV and non-DeltaV PCs.

**Hardware.** A Dell R740 or later model server with the following specifications is recommended for installing the Backup and Recovery Management Server on a DeltaV or non-DeltaV PC:

- CPU: Intel Xeon, 2.0 GHz (minimum)
- RAM: 16 GB (minimum), 1333MHz UDIMM
- Hard disk drive: 6 x 600 GB 15K RPM SCSI, RAID 10

Related Products

- DeltaV Distributed Control System
- AMS Device Manager
- DeltaV Logbooks
- DeltaV Virtual Studio

Prerequisites

- The Backup and Recovery Media Pack is required for installation of the Backup and Recovery software.
- Backup and Recovery v3.3 is available for use with DeltaV v11.3.1, v12.3.1, v13.3.1, v14.3 and v14.3 systems using DeltaV Live.
- Backup and Recovery v3.3 is available for use with DeltaV Virtual Studio v3.3 with hotfix DVS3.3_WS_02 and virtual machines updated as described in the DVS hotfix release notes.
- A DeltaV Application Station if installing the management server in a DeltaV v11.3.1, v12.3.1 or v13.3.1 system. Recommend that no other applications be installed on the Application station if it is used as the management server. It is not recommended to install Backup and Recovery v3.3 on an Application station in a DeltaV v14.3 system.
- A Dell R740 or later model server is recommended for use as the management server. Recommend that no other non-Backup and Recovery applications be installed on the management server.
- Backup and Recovery server may require additional storage for the backup data. Please make accommodations for properly sizing additional storage for your data.