

Backup as a Service

Backup of critical servers and application data is an important element in enterprise IT and can determine the success of a business. Hence it is essential for enterprises to backup essential data on a timely basis, which can be restored as and when required to ensure business continuity. NxtGen Backup as a Service can be extended to existing Customers who have subscribed to either hosting or ECS services of NxtGen, or can be proposed as a stand-alone service on-premise of the customer.

NxtGen's Backup as a Service is offered in two flavours:

1. Virtual Machine Snapshot backup using NxtGen's native cloud platform NG3
2. Data backup using standard backup tools like Commvault



1. VM Snapshot Backup using NG3 platform

Backups are used for copying and archiving target data (target is either a disk or a virtual server as a single whole of all disks used).

NxtGen cloud platform supports two types of backup for VMs:

- Normal - This is a simple method of taking backups by making full copy of target data and storing it in an archive.
- Incremental - This is an advanced method of taking backups. During the incremental backup, only the changes made after the last backup are archived instead of backing up the whole target. You must have dedicated backup servers configured in your cloud to be able to utilize the incremental backup functionality.

Each backup type can be taken in two ways:

- Manually - the user logs into NG3 control panel and manually triggers the backup
- Automatically - the user sets up a backup schedule (daily, weekly, monthly, yearly). The back up is done automatically.

2. Data Backup using standard backup tools

NxtGen uses Commvault as the choice of backup, across all platforms including IBM P-series. Commvault provides fast data mover to reduce the back-up window across multiple servers & platform – Data would be backed up to disk and archived to cloud storage platform.

2.1 Highlights

- Backup and recovery of selected files, folders, or a complete system
- Self-service backup monitor to control backups
- Centralized views of activities and alerts
- AES-256 data encryption in transit and at rest
- Governance throughout the data lifecycle
- End-to-end data security built in
- Search across all data (live and versioned)
- Leverage any mix of public, private, or hybrid cloud delivery models, to meet your unique business needs

Key Differentiators



Flexibility

The freedom to choose your data backup: either as a full data or VM snapshot backup



Customizability

Leverage any mix of public, private, or hybrid cloud delivery models, to meet your unique business needs

2.2 Service Overview

- This service can be provisioned to customers with Colocation, Hosting , ECS Services from NxtGen or as a standalone service at customer premises.
- In case of hosted and customer premise installations, each server that needs to be backed up requires a dedicated Network Port for connecting to NxtGen's backup network. For ECS customers, dedicated Virtual NIC for backup is provisioned as a part of NxtGen's infrastructure.
- In case of customer premise installations, a backup server needs to be implemented at customer premises (sizing will be dependent on customer requirement). This server should be accessible over WAN to NxtGen Command Center.
- Backup Local Area Network at customer premises to be provided and managed by customer.
- In all the above, customer shall provide necessary access credentials of the server, for NxtGen to install and configure the backup client.

2.3 Standard Backup Policy

NxtGen's standard backup policy provides daily incremental backup and fortnightly full backup with 28 days' retention of the backed up data.

- Full Backup: Includes all the source files. This method ignores the file's archive bit until after the file is backed up. At the end of the job, all files that have been backed up have their archive bits turned off. Only one full backup will be done per week followed by daily incremental.
- Incremental Backups: Includes only files that have changed since the last full (Clear Archive Bit) or incremental backup. The next time an incremental backup is done, this file is skipped (unless it is modified again).

2.4 Types of Backup

Backup types are broadly classified into the following:

- File system backup – done directly on the file system level wherein the customer is required to provide the absolute path of the data directory that needs to be backed up. This type of backup is useful for flat files and system files.
- Online backup - This type of backup is recommended for RDBMS and applications like MS SQL, Exchange etc.

Based on the data availability requirements customers are advised to choose either of the above backup types.

2.5 Backup Window

NxtGen's backup services are delivered through high-performance, Disk-to-Disk backup infrastructure. This provides fast and efficient backup process and the time to backup is greatly reduced when compared to conventional linear tape-based backup solutions.

NxtGen implements backup window based on the data volume anytime during the day. However customers may select and customize their backup window based on their workload, in consultation with NxtGen.

Backup restoration is provided on 24 x 7 basis on demand.