# Backups

## Why you should make backups

Backups are critical for preventing data loss. In order to assure that software and hardware problems do not result in massive data loss, backups of your server should be conducted on a regular basis. In addition to preventing data loss, backups may also enable you to restore your system back to a previous point in time if something goes wrong; this prevents the system administrators from having to spend time and energy reinstalling the server components.

In addition to backups conducted to prevent data loss, backups should also be conducted before any significant changes occur to your machine. Before any significant software changes or physical changes occur to the server a backup should be created in order to enable the restoration of the system to a non corrupt state.

## Different Levels of Backups

**Server Level Backups**

Server level backups consist of taking snapshots of the whole machine. This type of snapshot facilitates the restoration of your complete machine to a previous state.

**Component Level Backups**

Component level backups consist of backing up individual parts of an application or system system. With this type of backup individual components can be restored to a previous state without affecting other parts of the server.

## Recommendations and Best Practices

1. If your organization is providing data center support, have standard policies and practices for backups.
2. Establish recovery processes and test them to ensure that they work.