

Salesforce Backup Technical Whitepaper

OwnBackup
<https://www.OwnBackup.com>

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1 Introduction

OwnBackup specializes in providing state-of-the-art cloud-to-cloud backup & restore solutions. This white paper describes the technical aspects of OwnBackup's unique Salesforce backup & restore solutions. At its core, OwnBackup provides secure, automated daily backup of all your Salesforce Org (Sandbox and Production) data & metadata with unlimited¹ retention. These backups (or snapshots) are then available for preview, download, compare & restore via OwnBackup's secure & mobile-friendly website. OwnBackup offers an unlimited snapshot retention plan & there are no quota limits. OwnBackup is a Salesforce ISVforce² partner listed on Salesforce's AppExchange since 2012.

2 System Security

Due to the critical nature of the data stored on Salesforce.com, maintaining security is a top priority of OwnBackup. As such, the following security mechanisms are employed by OwnBackup:

- OAuth³: In order to avoid storing users' passwords whenever possible, OwnBackup utilizes the OAuth protocol in accordance with Salesforce recommendations.

¹Unlimited snapshot retention provided with Unlimited Plan only.

²Independent software vendor.

³<http://www.oauth.net>

- Multi-user access: provision additional read-only OwnBackup user accounts.
- IP Restriction: restrict access to your OwnBackup account from a given set of IP networks.
- Encryption
 - Data in transit: OwnBackup uses HTTPS when accessing Salesforce's APIs for downloading data and makes the data available for users only via the HTTPS protocol.
 - Data at rest: OwnBackup utilizes Amazon's EBS and Amazon's S3 in order to store users' data. The data volumes are encrypted via AES256 bit. Encryption keys are kept off-line and are only available to select individuals at OwnBackup.
- Secure architecture: OwnBackup's architecture was designed from the ground-up with security as the #1 priority. As such, the system utilizes the following technologies to maximize the overall security of the system: extreme sandboxes, firewalls, frequent security updates, frequent log reviews, independent security audits and other community-accepted best practices in order to ensure the system remains secure at all times.
- OwnBackup is a product of Recover Information Technologies LTD, an ISO 9001:2008 certified company. All the user data are stored on AWS (Amazon Web Services⁴⁵), a top-tier facility with the following accreditations: SOC1, SOC2, FISMA, DIACAP, FedRAMP, PCI DSS Level 1, ISO 27001, ITAR, FIPS 140-2, HIPAA, CSA, MPAA.

3 Salesforce Data Backup

OwnBackup's Salesforce service is designed to perform a comprehensive backup of your Salesforce Org. The following are the key attributes of the backup service:

- Standard objects, custom objects and custom fields are backed up.
- Attachments are incrementally backed up (at a default rate of max 2k files per day). In order to optimize API calls, sObjects with attachments (base64 fields) are specifically queried such that the results are returned in optimal chunks. Attachments from the following sObjects are supported: Attachments, ContentVersions, Documents, FeedItems, MailmergeTemplates, QuoteDocuments, Scontrols, StaticResources and other non-standard base64 attachments.
- Chatter messages (*Feeds and FeedItems sObjects) and their attachments (backed up incrementally in an optimal manner consistent with other attachments). Orgs with API quota issues have the option to exclude these sObjects from their daily backups.

⁴<https://aws.amazon.com/security/>

⁵<https://aws.amazon.com/compliance/>

- History sObjects (*History) & Share sObjects (*Share) exclusion. Orgs with API quota issues have the option to exclude these sObjects from their daily backups.
- Unique support for sObjects with a very large number of custom fields. (Salesforce API places a limit on SOQL query size. As such, in cases where the large number of fields results in a query exceeding the limit, queries fail and can cause the backup to fail. A unique approach to overcoming this limitation was developed by OwnBackup and is serving many customers).
- Backup parallelization support.
- Synthetic Full Backup support for very large Orgs (which has the benefits of a full backup & incremental backup).
- Support for Salesforce editions with no API access (e.g. Professional & Group).

The backed-up sObjects are kept in well-formed CSV format such that they can be easily upserted or inserted via Salesforce's Data-loader, or alternatively viewed/edited via any CSV file viewer/editor (e.g. Microsoft Excel). Attachments are kept in their native format (e.g. PDF attachments retain their original name and type), and are stored in a folder hierarchy that includes the sObject name, field name and attachment ID in order to facilitate full restore capability.

4 Salesforce Metadata Backup

OwnBackup's Metadata Backup provides daily metadata (also known as configuration data) backup to complement the daily Salesforce data backups. The backed-up metadata elements are kept in their native XML format and stored in a ZIP file structured for deployment via Force's IDE. Please see our FAQ⁶ page for a frequently-updated list of supported metadata objects.

5 Key Features

The following key features of the web application are highlighted:

- Onboarding is simple and quick - registration and adding a backup-service to backup all the data in the Org takes less than a minute.
- Easy previewing, downloading, comparing & restoring of snapshots.
- Per-snapshot Summary page allows quick overview of each sObject backup status, sObject size and number of records. sObjects in Summary page can be selected to preview or download its content (in CSV format).
- "Export Backup" link can be used to download a compressed archive of all the snapshot data (all the associated CSVs and attachments from selected backup).

⁶<http://www.ownbackup.com/faq.htm#7>

- “Force backup now” functionality enables the user to perform a backup on demand. This option is useful for situations where deployment is planned and a backup (snapshot) prior to the deployment is required.
- “Smart sObject Compare” automates comparing a particular sObject (and optionally its child sObjects) across two backup dates by generating a report with a breakdown of record changes between the two specified backup dates with links to associated CSVs. An interactive report with field changes at the record level per sObject facilitates efficient identification of changed records which is helpful for restoring desired changes. The tool can be used across backed-up environments (e.g. production backup & full sandbox backup).
- “Smart Metadata Compare” automates comparing all your metadata objects across two snapshots by generating a report with a breakdown of metadata object changes between the two specified backup dates with links to associated Zip package files (usable in the Force.com IDE). Specific metadata object diff reports are available in-line for efficient identification of the modified objects and in turn facilitate efficient restore of desired changes. The tool can be used across all backed up environments (e.g. production backup & full sandbox backup, or alternatively different development sandboxes).
- “Smart Restore Tools” helps users through the process of restoring parts of an Org following a data loss or data corruption event. Our “Parent & Child” restore tool is particularly helpful in recovering deleted records and their child-related records while maintaining the original relationships (e.g. after a deletion of accounts resulting in deleted contacts, opportunities, etc due to cascade-delete). The “Single sObject Corruption” restore scenario will take you through restoring an sObject that had been corrupted (e.g. character encoding mangling).
- Email notifications provide indication in case of backup failure and resolution thereafter.
- Detailed weekly backup status report is sent for the prior week’s backups. The report provides a high-level view of all your backup services, as well as the ability to drill down to the object level in case of a warning or error in one of the backups.

6 Summary

OwnBackup provides state-of-the-art cloud-to-cloud Salesforce backup & restore solutions. Our unique architecture & in-house technical expertise allow us to quickly react to Salesforce APIs modifications and additions and provide cutting-edge Salesforce Org backup & restore solutions. We continuously improve our service by providing additional functionality, improving our existing offering & responding to customer requests.