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Veeam Special Edition

Salesforce Backup

for
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Safeguard your
Salesforce data

—
Prevent data loss
and corruption

—
Create a strong backup
and recovery plan

Compliments
of

VEEAM

Paul McFedries

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Introduction

Salesforce became a global enterprise software powerhouse by offering a robust and wide-ranging set of tools for managing relationships for both existing and potential customers.

The advent of Salesforce has enabled more than 150,000 companies to forego their proprietary or ad hoc customer relationship tools in favor of Salesforce's powerful cloud-based software. However, that move to the cloud is not without its challenges. With some of your company's most crucial data now stored off-site in a cloud data center, IT now lacks control over that data and no longer has visibility into the workings of the customer relationship software. These are huge problems because they imply not only that IT likely has no idea how much data loss or data corruption exists within your company's Salesforce deployment, but also that neither IT nor your Salesforce admins can quantify the negative impacts that this data loss or corruption has on your business.

Is your data secure? What happens to your data if the server in which it's stored fails? Who's responsible for creating, maintaining, and restoring data backups?

These are important questions and *Salesforce Backup For Dummies* is here to answer them.

About This Book

Salesforce Backup For Dummies gives you the background and know-how you need to make smart decisions about safeguarding your mission-critical Salesforce data. Chapter 1 underlines the criticality of Salesforce data and takes you through the main issues behind backing up that data. Chapter 2 makes the case that not only is your Salesforce data at risk, but that it's at risk on multiple fronts. Chapter 3 helps you mitigate your data's risk profile by showing you how to create a backup and recovery plan and an optimized backup strategy. The book closes with Chapter 4, which takes you through ten best practices for Salesforce data security.

Foolish Assumptions

Salesforce Backup For Dummies is for people who are new (or relatively new) to backing up Salesforce data, even if you might be a seasoned Salesforce pro. However, this book assumes that you do have some familiarity (or even outright expertise) with Salesforce and backup technologies and procedures.

Icons Used in This Book

Like other books in the *For Dummies* series, this book uses icons, or little margin pictures, to flag particular info. Here are the icons in this book:



REMEMBER

This icon marks text that contains info that's useful or important enough that you'd do well to store the text somewhere safe in your memory for later recall.



TIP

This icon marks text that contains a shortcut or an easier way to do things, which aims to make your life — or, at least, the data analysis portion of your life — more efficient.



WARNING

This icon marks text that contains a friendly but insistent reminder to avoid doing something. You have been warned.

- » Knowing the importance of Salesforce data and metadata
- » Understanding who's responsible for your Salesforce data

Chapter 1

The Importance of Salesforce Data

Salesforce may seem simple to the average user, but there's a lot that goes into a Salesforce deployment. Once you start tweaking Salesforce with integrations, customizations, and other features necessary for your business, it can become an extremely complex (and therefore easy to break) application. And in any Salesforce deployment, the data it holds is vitally important to your organization and therefore deserves safeguarding.

“Mission Critical” Has Left the Building

Mission critical is an overused phrase, but it's no stretch to use it to describe your Salesforce data. That data is every bit as vital as any other on-premises or cloud server or application that you manage, so it needs a robust backup strategy. And let me guess: You probably don't back it up because it's in the cloud, right?

In this book, you learn about the risks to your Salesforce data, and you see that having robust backups enables you to repair Salesforce data loss and data corruption mistakes quickly and accurately, which can save your sanity — and your job!

Who's Responsible for Your Salesforce Data?

When companies first consider migrating their customer relationship management (CRM) to Salesforce, one of the (usually) unspoken assumptions is that all data moved to or created within the Salesforce cloud environment is automatically protected. Surely (so the thinking goes), Salesforce safeguards data using backups, snapshots, data redundancy, or, well, *something*.

Ah, the look of surprise, then shock, then horror that cross the faces of people when they're told that these safeguards are not automatic. "How can that be?" they ask in befuddlement.



WARNING

Salesforce uses data redundancy and other mechanisms to take care of the servers and other infrastructure that host your environment. After all, they are responsible for the uptime of the cloud service that you've paid for. But your responsibility is for everything you deploy in the Salesforce cloud. Your data, customizations, integrations, metadata, reports, files, and custom code are entirely your responsibility.

Understanding Data versus Metadata

Salesforce *metadata* includes items such as value sets, custom fields, page layouts, dashboards, and Apex triggers and classes. Restoring Salesforce data without also restoring your metadata means your Salesforce environment will run poorly or not at all! And much of what has been lost or corrupted isn't really fixed.

IN THIS CHAPTER

- » Understanding the inherent fragility of Salesforce data
- » Getting a handle on the human risks associated with Salesforce data
- » Taking a look at bad data habits

Chapter 2

Understanding Salesforce Data Risks

In Chapter 1, I mentioned that many people new to Salesforce are surprised that there's no automatic backup of their organization's data at the administrator's fingertips. That surprise only gets worse when you detail exactly the risks that their data faces once it resides within the Salesforce cloud app.



REMEMBER

Fortunately, as you see in the rest of the book, you can take steps to reduce or eliminate all the risks mentioned in this chapter.

Understanding Human Risks to Your Salesforce Data

Even though all your Salesforce data resides in the cloud, that doesn't mean you should no longer be concerned about failures created by the people interacting with it. In fact, many examples of Salesforce data loss and corruption can be traced back to

good old-fashioned human error. Here are just a few scenarios to consider:

- » **Salesforce administrator errors:** It's tempting — and with Salesforce's built-in tools, all too easy — for admins to insert or update data on-the-fly in a production environment. If something goes wrong with the operation, the resulting errors can quickly propagate throughout the application and ruin its relational integrity.
- » **Salesforce developer errors:** The Apex language gives developers great power. However, developers regularly work with configurations, workflows, and formulas that are extremely complex. The slightest mistake can create major havoc across Salesforce objects. For large installations, configuration changes happen daily, and pressure from the business to make changes quickly might lead to skipping standard release protocols.
- » **Over-privileged users:** It's unfortunately common for users in Marketing, Sales, or Finance to have Administrator access to Salesforce data, especially in smaller companies. Without the in-depth knowledge of a true Salesforce admin, these over-privileged users can do endless amounts of damage.
- » **Salesforce user errors:** Even users without special permissions can cause more damage than you might think, and not everything can be restored from the Recycle Bin or could age out before you realize it's missing.
- » **Malicious users:** Disgruntled or bribed employees can, with just a few clicks, overwrite or otherwise corrupt precious customer data. Imagine the havoc a sales exec could do who's one week away from leaving for a competitor and is keeping their names accounts.

Understanding Other Data Risks

With Salesforce tools such as Data Loader and Apex, admins, developers, and other members of your Salesforce ops team can perform a number of data operations, including large-scale insertions of new data, mass updates of existing records, multi-record upserts (combined insert and update operations), and bulk

deletions of unneeded records. A common Salesforce data operation is the merge, where multiple sources of, say, Account or Contact info are combined into a single resource. If you make a mistake, try pulling *those* apart afterwards!

Data Loader and similar tools make it easy to interact with Salesforce data and an admin or developer can use these tools to modify thousands of records in just a few seconds. Unfortunately, that ease of use also means it's all-too easy to erroneously modify or overwrite substantial chunks of precious data.



WARNING

This is particularly true of delete operations, where an admin might choose (or accidentally implement) a *hard delete*, where the data isn't sent to the Recycle Bin (where it can be retrieved for up to 15 days) but is, instead, deleted permanently!

Another source of data loss or corruption comes from the hundreds of Salesforce plug-ins and integration options that alter or move data. Many of these extras roll out data updates regularly and the loss or corruption of data or metadata is common.

Data Accidents Happen

To err, as the poet said, is human. We all make mistakes from time to time, and sometimes those mistakes can wreak havoc on your data:

- »» Someone inadvertently deletes data
- »» Someone thinks a resource is protected when it's not
- »» Someone is unaware of data that needs protecting
- »» Someone improperly modifies data
- »» An Apex script error accidentally deletes or modifies data
- »» A misconfigured setting for a Salesforce resource corrupts data

The Risks of Poor Data Hygiene

If you don't set up or configure your Salesforce resources correctly, your data is at risk of loss, exposure, theft, or ransomware. Here are some risks to consider:

- » An administrator might identify fields or datasets that are duplicative, incorrect, or no longer needed. However, knowing the fragility of Salesforce data, the admin does nothing because they're afraid that deleting the resource might cause a larger problem. The lesson? Avoid data sprawl and unnecessary fees by keeping Salesforce clean.
- » Not using the principle of *least privilege*, when assigning permissions. Rather than assigning a user or group only the permissions they require to do their job, if you instead assign a higher level of privileges, chances are someone will inadvertently use those extra privileges to perform some operation they shouldn't, with untold consequences to your data.
- » Exposing passwords in scripts or other files that are viewable by unauthorized users. Hardcoding authentication in this way is just asking for trouble.
- » Failing to revoke user permissions in a timely fashion when those permissions are no longer needed by a user.
- » Not following best practices when implementing custom Salesforce code. For example, rather than testing your code in a protected sandbox org or developer org, you deploy code straight to your production environment. That's just asking for data trouble!

See Chapter 4 for some best practices that can help keep your Salesforce data safe from these and other risks.

IN THIS CHAPTER

- » Creating a backup and recovery plan
- » Learning about Salesforce's native backup solutions
- » Putting together an optimal backup strategy

Chapter 3

Making Your Salesforce Data Robust and Resilient

The threats facing your Salesforce data are many, but you don't have to let those threats ruin your day. With a little advance planning, just a touch of healthy paranoia, and the conviction that your Salesforce data is critical enough to deserve protection, you can put together a robust and resilient plan to safeguard your data, keep your business running, and keep your customers from jumping ship.

Checking Out Salesforce's Backup Solutions

Want to know the secret of (relatively) stress-free Salesforce data management? One word: backups. If you have your data backed up, then you can relax knowing that you've got a way to recover *when* (not *if*) disaster strikes.

Salesforce offers several methods for implementing backups. For data, Salesforce offers the following:

- » **Data Loader:** Use the Data Loader tool's Export wizard to export a Salesforce object to a comma-separated value (CSV) file. Drawbacks: Supports manual backups only and exports just one object a time.
- » **Data Export Service:** Back up your Salesforce data to CSV files weekly or monthly (some Salesforce editions only offer monthly backups). You can also perform manual backups as needed. Drawback: The only way to back up more frequently than weekly is to perform the exports manually.
- » **Report Export:** Export the data underlying a Salesforce report to an Excel file (.xlsx or .xls) or a CSV file. Drawbacks: Supports manual backups only and detailed exports are limited to 100,000 rows and 100 columns.

Besides the specific drawbacks I mention for each data backup tool, there's one large negative associated with all of them: the backups are all CSV files! If you need to restore your data, good luck getting it done by digging through those CSV files.

For metadata, Salesforce offers the following:

- » **Change sets:** Copy Salesforce metadata from your production environment to another Salesforce organization, such as a sandbox or developer org. Drawback: Supports manual operations only.
- » **New sandbox:** Create a new sandbox, which automatically copies your production org metadata to the new sandbox org. Drawback: Creating the new sandbox might take as long as several days, so the sandbox org metadata might not be an accurate reflection of your current production org metadata.
- » **Ant migration tool:** Use the command line to retrieve metadata from a Salesforce org. Drawbacks: Complex to use and supports manual retrievals only.

Besides the specific drawbacks I talk about for each metadata backup tool, a bigger problem is that none of these tools offers an easy way to recover specific metadata in the event of data loss or corruption.

These methods offer varying degrees of usefulness and efficiency, but is any one of them the ideal solution for *your* data?



TIP

Creating a robust and resilient backup strategy requires a third-party backup solution that is purpose-built for Salesforce backup and recovery.

Setting Up an Optimized Backup Strategy

When deciding which backup solution to use for your Salesforce data, here are some considerations:

- » **Full backups are a must:** At its core, Salesforce is a relational database management system and even modest Salesforce deployments are a complex web of cascading relationships between objects. Backing up just a few of the most “important” objects just won’t work.
- » **A full backup includes metadata:** To rebuild a house, you can have the supplies you need, but without detailed blueprints, all you really have are piles of lumber, drywall, and bricks. Salesforce metadata is analogous to those blueprints. If your backup doesn’t include metadata, all you can restore are disconnected collections of objects, such as accounts, leads, and contacts.
- » **Create an automated backup schedule:** Relying on manual backups is only marginally better than not backing up at all, because manual backups either don’t get done or aren’t done frequently enough. A crucial aspect of your backup strategy is to create a backup schedule and then set up your backups to run automatically.
- » **Backup frequency should correspond to data change frequency:** The slower the rate of change for a Salesforce object, the less often you need to back up that object. Put another way, if your Salesforce deployment includes critical objects that change frequently, then your backup frequency for those objects must be correspondingly frequent. To meet an RPO target for an object that changes multiple times a day, a weekly backup won’t do the job. Some Salesforce objects might need backing up as often as every 60 seconds.

- » **Allow for granular data restores:** A major catastrophe might require you to restore your entire Salesforce deployment, but most data loss or corruption scenarios involve just a few items at the object, record, or field level. Restoring more than was lost or corrupted could overwrite healthy data. Your strategy requires the capability to perform granular restores as needed to recover just the lost or corrupted data.
- » **Isolate your backups:** Having backups stored along with your production deployment is just asking for trouble. If that deployment fails or succumbs to an internal or external threat, your backups fail along with it, thus slowing (or even preventing) recovery.
- » **Make backups portable and accessible:** Your backups should be easily moved between the Salesforce platform and either your on-premises network or separate cloud deployment. You should have full transparency into and control over your backups, whether or not that's a data compliance issue for your business.

Depending on the specifics of your Salesforce deployment, meeting even a few of these backup requirements is likely not possible using only the native backup tools.



TIP

A well-designed product enables you to securely back up Salesforce data and metadata to any location you specify; set up flexible backup scheduling and retention settings at the object-level; continuously back up your data as often as every 60 seconds; quickly restore Salesforce data, including options for restoring at the hierarchy (parent/child), field, and metadata levels; protect against human error and integration issues; and simplify Salesforce data compliance.

- » Automating, scheduling, separating, and encrypting backups
- » Revoking backup access and restoring hierarchies and metadata

Chapter 4

Ten Best Practices for Salesforce Backup

Even if you've come up with an optimal backup strategy (as I discuss in Chapter 3), that doesn't mean you can check "secured Salesforce data" off your to-do list. If you're serious about Salesforce data security (and I know you are), then here are a few more best practices to consider:

- » **Automate your backups.** When you work on a document in the cloud, it gets saved automatically. Doesn't that feel good? Isn't it much easier than having to remember to save your work frequently? Now apply that good feeling to your Salesforce data. That is, automate your Salesforce data backups for instant peace of mind.
- » **Create a backup schedule that works for you.** Get to know how often your Salesforce data changes and then set up a variable backup schedule that reflects that frequency for each object. That said, note that almost every Salesforce deployment should shoot for daily full backups at a minimum.

- » **Compare a backup to production.** Ideally, you should be able to look inside your production instance and your backup and identify what's missing and only restore those components that are missing or recently changed.
- » **Separate your backup from the platform.** Your Salesforce backup should be separated from the Salesforce platform. That way, even in the rare case where Salesforce itself goes dark, your data remains safe and recoverable quickly.
- » **Revoke access to data when it's no longer needed.** A variation on the principle of least privilege might be called "no privilege." That is, when a user no longer requires access to cloud data (for example, by quitting or being fired), you should immediately revoke that user's access to the data.
- » **Future-proof your backups.** If you're looking at third-party Salesforce backup solutions, beware of products with non-prescriptive approaches that lock data in and won't scale. Instead, look for a solution that offers data flexibility and the scalability required to handle your organization's growing data volume.
- » **Backup and restore your Salesforce parent/child hierarchies.** The capability of designating accounts to be the children of parent accounts via the External Account Hierarchy feature is extremely useful for many Salesforce deployments. Make sure you can both back up and restore your hierarchies.
- » **Easy does it.** When the time comes to restore lost or corrupted data, make sure the restore interface is easy to use so that you can quickly get your data back online without doing further damage. It should be easy to make granular restore selections so that you restore just the data that was lost or corrupted.
- » **Restore data and metadata together.** Any restore procedure must include both your data and your metadata, since these are entwined; restoring them separately can cause new problems.
- » **A complete backup platform.** Find a vendor that doesn't just do Salesforce backup, but covers other critical parts of your hybrid cloud infrastructure. For example, VMs, file share, physical servers, cloud VMs, Microsoft 365, and so on.

Make your Salesforce data robust and resilient

Thousands of companies choose Salesforce's powerful cloud-based customer relationship software tools. However, with crucial data now stored off-site in a cloud data center, IT often lacks control over that data and no longer has visibility into the workings of the customer relationship software.

Salesforce Backup For Dummies gives you the background and know-how you need to make smart decisions about safeguarding your mission-critical Salesforce data. Understand the risks to your Salesforce data, and you see that having robust backups enables you to repair Salesforce data loss and data corruption mistakes quickly and accurately, saving your sanity — and your job!

Inside...

- Know the importance of Salesforce data and metadata
- Understand who's responsible for your Salesforce data
- Take a look at bad data habits and the human risks associated with Salesforce data
- Put together an optimal backup strategy
- Discover best practices for Salesforce backup

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