



Indiana Center of Excellence (CoE) Salesforce Platform Data Storage Management Best Practices

Introduction/Overview

Salesforce Org storage allocation depends upon its edition and number of licensed users. Storage is divided into two categories: **Data Storage and File Storage**.

Data Storage: Holds records tied to All Salesforce Objects like Account, Contacts, Opportunities, Custom Objects etc (average record size ~2 kilobytes).

Contact Manager, Group, Essentials, Professional, Enterprise, Performance, and Unlimited Editions are allocated 10 GB for data storage, plus incrementally added user storage. For example, a Professional Edition org with 10 users receives 10 GB of data storage, plus 200 MB, for 10.2 GB of total data storage.

File Storage: Stores uploaded files such as photos, attachments, assets files, knowledge articles etc.

Contact Manager, Group, Professional, Enterprise, Performance, and Unlimited Editions are allocated 10 GB of file storage per org. Essentials and Starter Editions are allocated 1 GB of file storage per org.

Both Data Storage and File Storage are calculated asynchronously, so if you import or add a large number of records or files, the change in your org's storage usage isn't reflected immediately.

Exceeding storage limits (around 110% of capacity) can lead to system performance degradation and error messages in some cases.

As agencies in Indiana grow and bring more users/features into their Salesforce Org, the volume of data and files also increases. In order to be successful in Salesforce implementation, efficient data management is paramount, impacting everything from decision-making to customer satisfaction and operational efficiency. Neglecting data quality and management can lead to significant problems, including increased costs, decreased revenue, and compromised strategic decisions.

Understanding Data Quality and Its Impact

Data quality is a multi-faceted concept that directly influences the effectiveness of Salesforce Application. Key aspects include:

- **Uniqueness:** The absence of duplicate records.
- **Accuracy:** Ensuring information like phone numbers, emails, and mailing addresses are correct.
- **Completeness:** Having all necessary fields filled for a record and all expected records present in the database.
- **Usage:** Ensuring collected data is actually being utilized for business purposes.

- **Validity:** Data adhering to predefined standards (e.g., valid phone numbers, postal standards).
- **Age/Recency:** Data being current and relevant.

The Cost of Poor Data Quality:

- **Inability to Make Informed Decisions:** You can't make an informed decision if you don't trust the data.
- **Customer and Employee Dissatisfaction:** Leads to a huge vulnerability to dissatisfaction.
- **Low System Adoption:** Bad data results in loss in trust means low adoption of the systems.
- **Increased Storage Costs:** Salesforce charges for additional data.
- **Undermining AI Initiatives:** AI is only as good as the data upon which it is grounded... if we want well-grounded credible trustworthy AI output the main input is quality data.

Causes of Poor Data:

- **Lack of Governance and Ownership:** The primary cause is more cultural, and people oriented than technology. This includes a lack of coordination and a clear framework for decision-making regarding data.
- **Integration Errors:** Incorrect mappings, triggers, or configurations during integrations can introduce poor data or duplicates.
- **Poor User Experience:** Complex or tedious data entry forms discourage users from maintaining data quality.
- **Lack of Tools:** data management tools are not optimized for tasks like deduplication and data enrichment.

Strategies for Storage Management and Cost Reduction:

- **Monitor Data Growth:** Regularly review Salesforce's "Storage Usage Page" and use custom reports to track record counts, sizes, modification dates, and growth trends.
- **Identify High-Growth Data Objects:** Focus on objects like Leads (especially unconverted), Tasks & Events, Emails & Attachments, Cases & Contacts, Account and your applications specific Standard & Custom Objects, as these tend to consume storage rapidly.
- **Implement Record Types:** Improve information organization and reduce data duplication by customizing fields, processes, and layouts for the same object in different categories.
- **Data Archival:** Move dormant or irrelevant data to dedicated, lower-cost storage locations while maintaining access for compliance or future reference.
- **Data Cleanup:** Regularly delete unused fields, records, and legacy test data.
- **Custom Settings Implementation:** Store configuration information outside standard objects, reducing redundant records.

- **Data Retention Policies:** Define and enforce policies to automatically delete or archive data after a specific period, aligning with internal needs and regulatory requirements.
- **Third-Party Data Management Software:** Solutions like [Own](#) (now a Salesforce product - separate license), [Odaseva](#), [GRAX](#), [Spanning Backup](#), etc. offer advanced capabilities beyond native Salesforce tools, including extensive data backup, data monitoring, flexible archiving, and disaster recovery.

Data Archiving: A Key Strategy

Data archiving is the systematic process of relocating dormant data out of production to secondary storage for long-term retention. Archiving Salesforce data helps organizations effectively comply with internal and external access and retention policies, reduce storage usage, and increase productivity.

Data Archiving vs. Backup & Recovery:

- **Archiving:** Focuses on moving inactive data from primary storage to secondary locations for long-term retention, reducing primary storage strain and improving performance. Archive data consists of older data that is still important to the Organization and may be needed for future reference, as well as data that must be retained for regulatory compliance.
- **Backup:** Creates copies of current data for recovery purposes in case of loss or corruption.

Benefits of Data Archiving:

- **Reduce Storage Costs:** By archiving dormant data, your business can reduce the strain on its primary storage systems, thereby facilitating low-cost storage.
- **Improve System Performance:** A cleaner production environment makes it easier to find active production data and speeds up user response times.
- **Minimize Risk Surface:** Reduces the amount of data in production that could be impacted by a disaster event.
- **Meet Compliance Requirements:** Supports a more tactical, intentional approach to custom retention policies, ensuring that you're staying on the right side of compliance.

Data Archiving Best Practices:

- **Automate Archiving Capabilities:** Implement custom data retention policies that save as much time as they do storage space.
- **Ensure Data Storage Is Secure:** Implement encryption and access controls for archived data.
- **Ensure Data Utility:** Remove outdated insights to ensure data is relevant, useful, and accurate for decision-making.

- **Understand Data Growth:** Continuously monitor data volumes and storage requirements.
- **Determine Success Criteria:** Define objectives for archiving, such as improving query response time or maximizing storage usage.
- **Establish a Data Retention Policy:** Classify data and create specific retention policies by object, keeping relationship hierarchies in mind.
- **Test Archiving Activity:** Run reports to review data scheduled for archiving and verify filter criteria.
- **Follow a Time-Tested Methodology:** Have a project plan for continuous data management, backup, and archiving.
- **Ensure Restoration:** Maintain regular backups of your entire database, including archived data, for potential restoration.

Salesforce Backup and Recovery

Salesforce provides several out-of-the-box mechanisms for data protection:

- **Real-time data replication:** All client data is replicated internally and to an ISO 27001 certified disaster recovery data center in another geographic area.
- **Data Loader:** Can create scheduled backups (every seven days) of data into CSV files, which can also be used for restoration.
- **System Recycle Bin:** Stores deleted records for up to 15 days or until manually purged.
- **Metadata API:** Allows for backing up system definitions like objects, fields, and page layouts.

Common Data Risk and Recovery Scenarios:

- **Human Error:** Accidental deletion or reassignment of records.
- **Malicious Intent:** Intentional data deletion or modification by disgruntled employees.
- **Integration or Promotion Errors:** Errors in metadata changes, code defects, or incorrect data transformations.

Key Considerations for an Enterprise Solution:

- **Security:** Backup medium and storage must be secure from unauthorized access and available for restoration. This includes security parameters for the data (permission sets, sharing rules, etc.).
- **Scalability & Performance:** The solution must handle large data volumes for both backup (initial full copy, then incremental changes) and rapid restoration.
- **Data Retention:** Solutions should specify how long data is retained and support point-in-time restoration, considering legal retention requirements.
- **Automation:** Minimize manual intervention, allowing for granular backup schedules (hourly, daily, etc.).
- **System of Record:** Clearly define which systems are the system of record for specific data domains and consider integration with external systems.

Best Practices for a Data-Centric Approach

A data-centric approach to Salesforce management involves a strategic discipline across several areas:

- **Governance:** Establish a framework for collaboration, alignment, and decision-making on how data is collected, stored, and used. This involves defining roles, responsibilities, and standards (e.g., consistent use of lead objects, lead source definitions).
- **Processes:** Define core business processes (e.g., visitor to lead, lead to opportunity, delivery to repeat business) and their associated data implications.
- **Automation:** Implement automations to streamline data updates and reduce manual entry (e.g., automatic lead conversion, opportunity naming conventions, customer type updates). Salesforce Data Cloud is democratizing these capabilities, making cross-system automation more accessible.
- **Integrations:** Carefully plan and configure integrations with other platforms (marketing automation, sales engagement, document management) to ensure data quality and maintain a "system of truth" (Salesforce) while other systems may act as "systems of record."
- **Monitoring and Reporting:** Utilize Salesforce native dashboards and exception reports to track data usage, growth, and identify areas requiring action (e.g., opportunities past close with no activity).
- **Data Hygiene Education:** Train end-users on best practices to avoid duplicate records, use picklists, and log only necessary data.
- **Standardization:** Implement naming conventions, standard prefixes/suffixes, and use built-in picklists for states and countries.

Conclusion

Effective Salesforce data management is not merely a technical task but a strategic organizational imperative. By understanding data quality, implementing robust archiving and backup strategies, and adopting a data-centric approach across governance, processes, automation, and integrations, organizations can leverage Salesforce as a true system of truth, driving informed decisions, enhancing customer and employee satisfaction, and ensuring compliance.

Salesforce Documentation

[Data Management Best Practice Guide](#)

[Data and File Storage Allocation](#)