



Data Protection for SaaS – Why it is needed?

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The Taxi Vs Self-Owned Car Analogy



Agenda

- 1) SaaS Application – What comes to your mind?
- 2) On-Premise Data Protection Strategy
- 3) SaaS Application Data Protection
- 4) How to evaluate a Backup/Recovery Solution for your SaaS provider?
- 5) Integrating to a SaaS application platform
- 6) Demo

SaaS Applications – What comes to mind?



Your Data is Your Responsibility



“Although Salesforce does maintain backup data and can recover it, it’s important to regularly backup your data locally so that you have the ability to restore it to avoid relying on Salesforce backups to recover your data.”

--- [Salesforce Help](#)



Microsoft advocates to take backup of your O365 data for your own peace of mind.

[Know More](#)



Backup goes back to maximum 30 days. Need to contact Servicenow support to recover any data.



For longer retention of purged data, need to have Gvault or external backup.



On-Premise Data Protection Strategy

On-Premise Data Protection

Pros

- Administrative Control
- Flexible RPO/RTO
- Multi-Layered Data Protection
- Self - Controlled IT Infrastructure

Requirements

- Backup Infrastructure
- Operational Overheads and Expenses





SaaS Applications Data Protection

What SaaS Data Protection means?

What are different aspects of SaaS Data Protection?

Privacy

- Defence in Depth
- Break Detection & Prevention
- SIEM – Security, Information and Event Management

Security

- Broader
- Notice/Consent
- Openness
- Relevance
- Regional
- Sensitivity
- Content Limits

Availability

- Application Design & Architecture
 - Design for Performance
 - Graceful Exits,
 - Instance Isolation
- Service Level Agreements
 - Uptime Guarantees
 - Maintenance & Outage Management

Regulatory Compliance

- Contractual Obligations
- Indemnification Clause
- Global Legal Compliance
 - Local Regulatory Laws
 - SOX
 - SEC
 - HIPAA
 - FedRamp
- Audit Compliance framework

Backup/Recovery

- Organizational RPO/RTO
- Data Retention
- Restore Granularity
- Flexible Recovery Points

What drives you to backup Data?

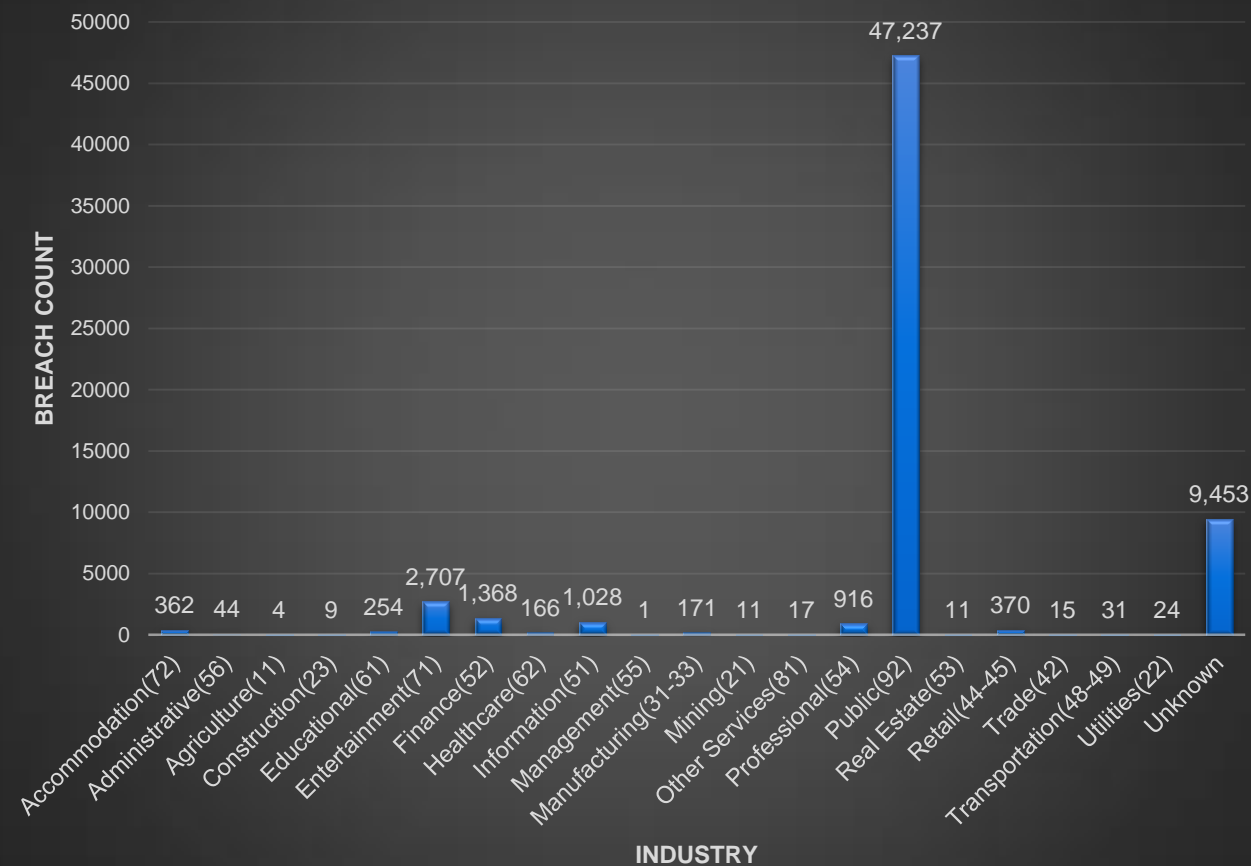
What could cause a Data Corruption or Loss in the SaaS world?

- Accidental Deletes by users
- Use of 3rd Party Applications
- Malicious Intent
- New Configuration and Deployment
- SaaS platform issues like Database corruptions and Storage Failures
- Ransomware/Virus Attack/Hackers

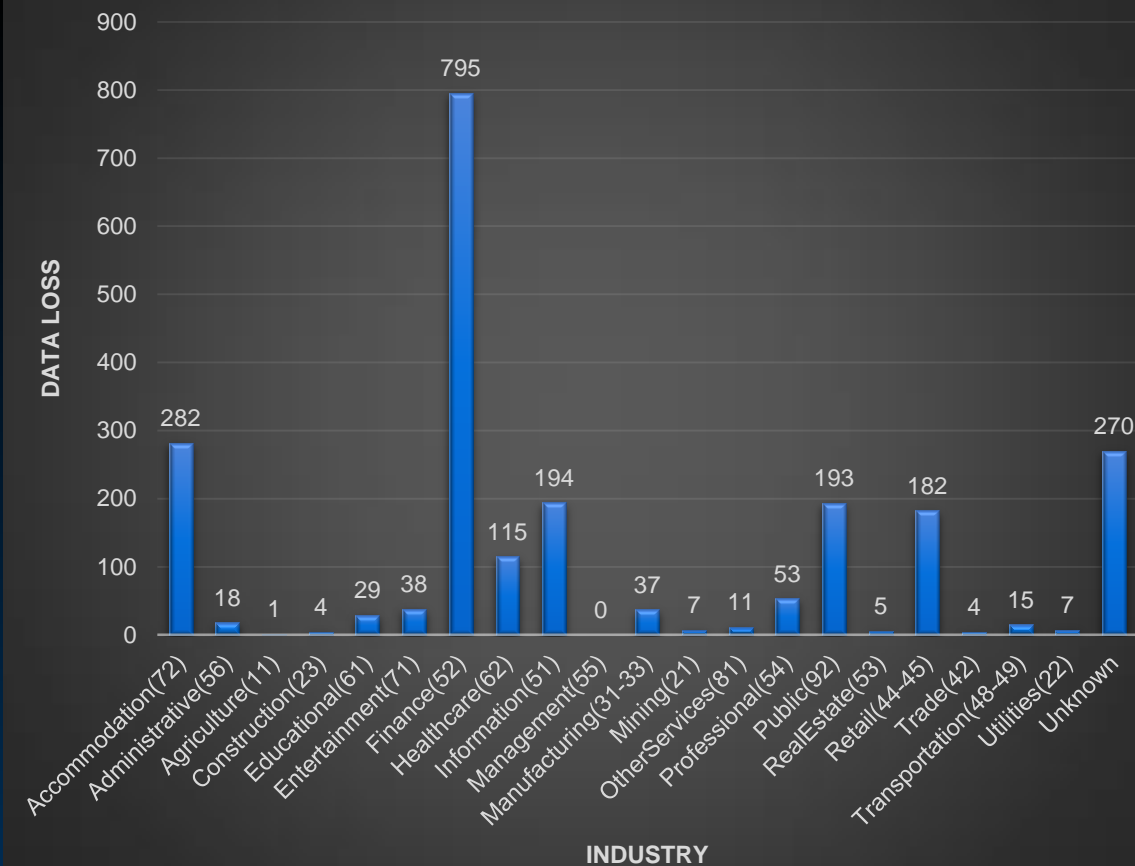
Victim Demographics

How many Data Breaches Happened? How many of it resulted in Data Loss?

Industrywise Data Breaches



Breach Causing Data Loss



http://www.verizonenterprise.com/resources/reports/rp_DBIR_2016_Report_en_xg.pdf

How SaaS Application Backup Data?

Out of the box Backup & Recovery offered by SaaS providers

- Keeping Multiple Copies of the Data
- Weekly full redundant backups
- Daily incremental backups
- Backup retention for a limited period
- RPO and RTOs
- Regulatory Compliances

It's designed for
Service Availability
issues.

SaaS Backup & Recovery – What is lacking?

Issues with SaaS Application provider Data protection Strategy?

- No customer centric backup solution
- Backup Data Retention
- Unreasonable RPO and RTOs in case of a Data Loss
- Restore Granularity
- Cost associated with recovery
- Meeting Compliance Requirements





Evaluate a Data Protection Solution for your SaaS provider?

Ask the right questions?

What questions you should ask while finalizing on a SaaS data protection solution?

- Cost
- Flexible RPO/RTO
- Data Security – Both In-flight and At Rest
- Meeting Security Standards and Compliance
- Self-hosted Vs SaaS/Managed Backup application
- Ease of use
- Restore Granularity
- Multi-SaaS vendor Support
- Backup Retention
- Criticality of the Data



Integrating to a SaaS application platform

Considerations for Integrating to SaaS platforms

- Understanding the SaaS application workflows
- Understanding the Platform Layout
- Authentication Mechanism
 - Protocol used (Usually OAuth 2.0)
 - OAuth endpoint
- Data Model
- APIs Exposed by the SaaS platform
- API limits for the Platform



Demo



[Salesforce login](#)



Thank you.