MSSQLTips Free SQL Server Conference Registration + Travel Expenses click to learn more

SQL Server Security Tips

IMPROVE ANY SQL SERVER AUDIT
Monitor, audit and alert on SQL user activity and data changes with SQL Compliance Manager.
START MY TRIAL
IDERA

Administrators

- Assigning DBA Rights in SQL Server
- Can I stop a System Admin from enabling SQL Server xp_cmdshell?
- Different ways to secure the SQL Server SA Login
- Identify Local Administrators on a SQL Server box using PowerShell
- Secure and disable the SQL Server SA Account
- Security Issues with the SQL Server BUILTIN Administrators Group
- When not to use the sa password in SQL Server applications
- When was the last time the SQL Server sa password changed?
- Who is logging in as the sa login in SQL Server?

Application

- ASP.NET Security for SQL Server
- Reflect on SQL Server Security Considerations After Recent Breaches

Auditing

- Backdoor to Elevate SQL Server Security Privileges
- SQL Server Security Vulnerability Assessment Tool in SSMS 17.4

Certificates

- Exporting and Importing SQL Server Always Encrypted Certificates for Client Access

Checklist

- Protecting SQL Server from Ransomware
- SQL Server Security Checklist

Cloud

- Running SQL Server Databases in the Amazon Cloud: Q & A

Configuration

- How to configure SSL encryption in SQL Server
- How to troubleshoot SSL encryption issues in SQL Server
- Is disabling xp_cmdshell in SQL Server really secure?

Connectivity

- How to Connect to a SQL Server Named Instance

Cross Database

- Breaking ownership chaining within a schema in SQL Server
- Dynamic SQL and Ownership Chaining in SQL Server
- Options for cross database access within SQL Server
- Ownership chaining in SQL Server security feature or security risk
- Understanding Cross Database Ownership Chaining in SQL Server

Data

- SQL Server Functions to Mask Confidential Data using CLR or PowerShell

Data Masking

- SQL Server Dynamic Data Masking Discovery and Implementation

Database

- Database level permissions for SQL Server 2005 and 2008
- Giving and removing permissions in SQL Server
- Implicit Permissions Due to Ownership Chaining or Scopes in SQL Server
- SQL Server Database Guest User Account
- Windows Groups to Support SQL Server 2005 Application Security

Database Roles

- Implicit Permissions Due to SQL Server Database Roles
- Nesting Database Roles in SQL Server

- Retrieving SQL Server Fixed Database Roles for Disaster Recovery
- The Power of the SQL Server Database Owner
- Understanding SQL Server fixed database roles

Design

- Application Database Security Design - Part 1 - Authentication for SQL Server

Encryption

- How to Enable Secondary Decryption of SQL Server Symmetric Keys
- Securing and protecting SQL Server data, log and backup files with TDE
- SQL Server Transparent Data Encryption (TDE) Performance Comparison
- Understanding the importance of key length with the SQL Server asymmetric encryption algorithms
- Understanding the SQL Server HASHBYTES hashing algorithms
- Understanding the SQL Server Symmetric Encryption Algorithms
- Using Views to Expose Encrypted Data in SQL Server

Extended Stored Procedure

- Creating a SQL Server proxy account to run xp_cmdshell
- How do I secure a SQL Server extended stored procedure?
- Replace xp_cmdshell command line use with SQL Server Agent

File System

- Accessing the Windows File System from SQL Server
- Auditing Critical Windows Files and Folders for SQL Server
- Retaining File Information for ETL Security Analysis

Installation

- SQL Server 2005 Installation Log File Security Vulnerabilities

Logins

- Best Practices to Secure the SQL Server sa Account
- Clone a SQL Server login and password to a new server
- Cloning a SQL Server Login with all permissions using PowerShell
- Find All Failed SQL Server Logins
- Grant User Access to All SQL Server Databases
- How to Create SQL Server Logins with PowerShell
- Inventory SQL Logins on a SQL Server with PowerShell
- Map between SQL Server SIDs and Windows SIDs
- Prevent and Log Certain SQL Server Login Attempts
- Quickly Find Failed SQL Server Logins Using the Windows Event Log

Migration

- Migrate SQL Server Logins with PowerShell
- Migrate the Correct Logins with a SQL Server Database

Network

- Automated way to get all port information for SQL Server instances
- Configure Windows Firewall to Work with SQL Server
- Creating a Kerberos Delegation Table for SQL Server Access
- Get SQL Server SPN information for all servers using PowerShell
- Network communications mechanisms for SQL Server
- Protecting the SQL Server Backup folder
- Register a SPN for SQL Server Authentication with Kerberos
- Script to Check and Auto Generate SPNs for SQL Server
- Understanding When SQL Server Kerberos Delegation is Needed
- Using nmap to scan for SQL Servers on a network

Notifications

- Get Alerts for Specific SQL Server Login Failed Events

Objects

- Options for hiding SQL Server code

Overview

- Practice of Using Privileged Accounts to Access SQL Server

Passwords

- Add a Salt with the SQL Server HASHBYTES Function
- Encrypting passwords for use with Python and SQL Server
- Generating A Password in SQL Server with T-SQL from Random Characters
- Generating a Password in T-SQL from a Table of Words
- How to configure password enforcement options for standard SQL Server logins
- How to Unlock a SQL Login Without Resetting the Password
- Identify blank and weak passwords for SQL Server logins
- Simple SQL Server Function to Generate Random 8 Character Password
- Storing passwords in SQL Server – things to know to keep the data secure
- Tracking Login Password Changes in SQL Server
- Using PowerShell to Audit for Blank SA Passwords

Permissions

- Application Database Security Design Part 2 - Multiple Levels of Access to SQL Server
- Blocking SQL Server db_datareader, db_datawriter, and db_owner Permissions

- Compare SQL permissions using SQL Server Data Tools
- Determining Permission Issues for a SQL Server Object
- Extend the REVERT statement using the WITH COOKIE clause in SQL Server
- Filtering SQL Server Columns Using Column Level Permissions
- Grant Truncate Table Permissions in SQL Server without ALTER Table
- Granting permission with the EXECUTE AS command in SQL Server
- How come I can create SQL Server objects but not access these objects
- How to Clone a SQL Server Login, Part 1 of 3
- How to Clone a SQL Server Login, Part 2 of 3
- How to Clone a SQL Server Login, Part 3 of 3
- How to use module signing for SQL Server security
- Identifying the Tie Between Logins and Users
- Implementing SQL Server Row and Cell Level Security
- Issues Determining an Individual SQL Server User's Permissions
- Retrieving SQL Server Permissions for Disaster Recovery
- SQL Server nested securable permissions
- SQL Server Permissions Granted to All Users By Default
- Understanding and dealing with orphaned users in a SQL Server database
- Understanding GRANT, DENY, and REVOKE in SQL Server
- Understanding How A User Gets Database Access in SQL Server
- Verify the databases a SQL Server login can see - and why

Personally Identifiable Information

- PCI Best Practices Guide for SQL Server DBAs
- SQL Server PCI DSS Security Patching Checklist

Planning

- Is your SQL Server environment ready for GDPR?

Processes

- SQL Server separation of duties

Professional Development

- Protect Confidential SQL Server Data Q and A
- SQL Server Security Community Questions on Windows, Server Level, Database, Roles and more

Regulations

- How does GDPR impact your SQL Server Recovery Plans

Row Level Security

- Performance Impact of SQL Server 2016 Row-Level Security

Schema

- Default Schema for Windows Group in SQL Server
- Script to Set the SQL Server Database Default Schema For All Users

Scripts

- Script to determine permissions in SQL Server 2005
- Script to Drop All Orphaned SQL Server Database Users
- Script to drop SQL Server login and all owned objects using PowerShell
- Script to move all objects to a new schema for SQL Server
- SQL Server security report to show sysadmins and database owners

Server

- Hiding instances of SQL Server 2005
- How to check SQL Server Authentication Mode using T SQL and SSMS
- Identify SQL Server 2005 Standard Login Settings
- Meltdown and Spectre Vulnerabilities Impact on SQL Server
- Potential Security Exploit Using CONTROL SERVER Permissions in SQL Server
- Server level permissions for SQL Server 2005 and SQL Server 2008
- SQL Servers Assessment for the Meltdown and Spectre Vulnerabilities

Server Roles

- Creating a SQL Server 2012 User Defined Server Level Role
- Identifying SQL Server logins with overlapping server roles
- SQL Server User Defined Server Roles
- Tighten SQL Server security with custom server and database roles
- Understanding SQL Server fixed server roles

Service Accounts

- How to Create Secure SQL Server Service Accounts
- How to determine service related privileges for Sql Server service account
- SQL Server Service Account Privileges
- Understanding how SQL Server handles Service Isolation
- Using Group Managed Service Accounts with SQL Server
- Using Managed Service Accounts with SQL Server
- Why System Account is a bad idea for SQL Server Service Account

System

- Enabling xp_cmdshell in SQL Server 2005
- Extended Protection available in SQL Server 2008 R2
- How to eliminate SQL Server security issue caused by sp_replwritetovarbin
- New Security Catalog Views in SQL Server 2005 and SQL 2008

Tables

- How to Setup Row Level Security for SQL Server

Tools

- Auditing and Improving Security with SQL Secure
- Protect and Mask Sensitive SQL Server Data for Development and Test Environments
- Securing SQL Server with SQL Secure

Troubleshooting

- Cannot make a role a member of itself error in SQL Server
- Correct the SQL Server Authentication Mode in the Windows Registry
- Different Ways to Find SQL Server Orphaned Users
- Get Back into SQL Server After You've Locked Yourself Out
- How to connect to SQL Server if you are completely locked out
- More on Recovering Access to a SQL Server Instance
- Recover access to a SQL Server instance
- Security issues when using aliased users in SQL Server
- SQL Server 7.0 to 2005 Security Vulnerabilities Could Allow Elevation of Login Privileges
- SQL Server errors with drop login and drop user
- SQL Server Login Failure Error 18456, Severity 14, State 10
- SQL Server Login Issue With Default Database
- Steps to Drop an Orphan SQL Server User when it owns a Schema or Role
- Suspect SQL Server 2000 Database (Part 1 of 2)
- Unable to see a SQL Server table
- Why Can't I Set a Default SQL Server Schema for My Windows Group Login?
- Windows cannot access the specified device, path or file error

View

- Filtering Columns in SQL Server Using Views
- Grant limited permissions to create SQL Server views in another schema Part 1
- Grant limited permissions to create SQL Server views in another schema Part 2

More SQL Server Solutions

SQL Server, Azure and AWS. **Owned.**

DOWNLOAD NOW