Accessing an Organization's Database



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Typical Ways to Access a Database



The database is managed by someone else inside their network



The database is open to connections; possibly managed by your organization on your network



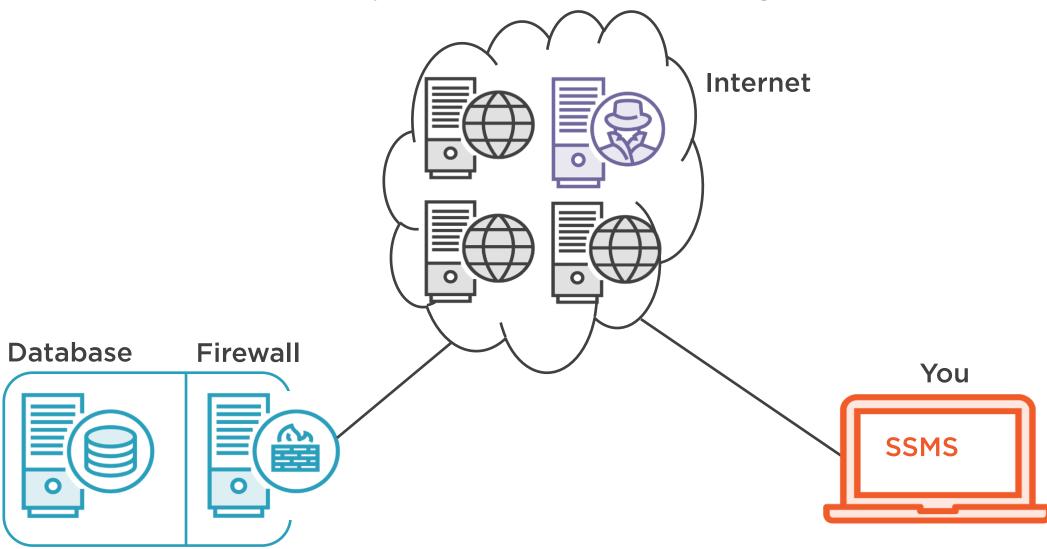
From a backup of the database



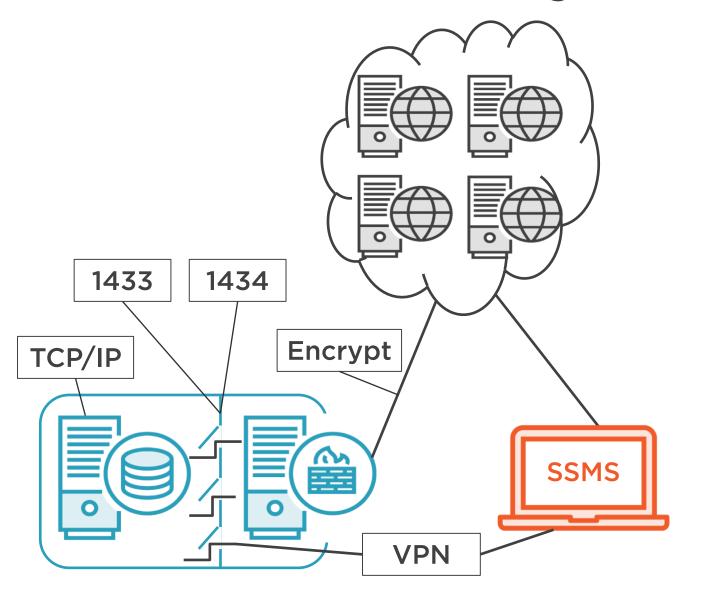
Access a Database Outside Your Network



Simple Network Diagram



Allowing a Connection



Open port 1433 to listen

Open port 1434 and inbound UDP to discover

Enable TCP/IP connection

Create and install certificate for encryption

Monitor and support

Security audit

VPN connection



Request Read or Write Permission



Granular Permission



Individual user or by role

Grant or deny

Read, insert, update, delete, execute

Tables, views, stored procedures

Even specify columns in tables



Two Predefined Database Roles



Data reader



Data writer



Demo



Database security settings



Backup and Restore a Database



Why Back Up?



Hard drive failure



Import or update error



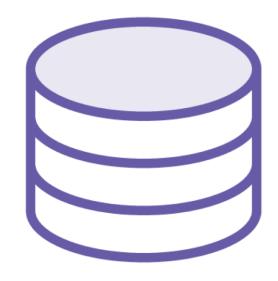
User error



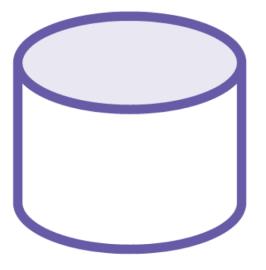
Types of Backups



Full backup .bak



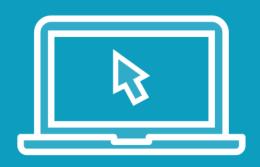
Data and schema .bacpac



Schema-only .dacpac



Demo



Create a database backup

Restore a database from backup



Summary



How to ask to connect to someone else's database

Security permissions to request

How to create a backup

How to restore from a backup

