SQLskills Immersion Event

IEAzure: Azure VMs and Azure SQL Database

Module 0: Overview

Tim Radney
Tim@SQLskills.com

Daily Course Format – Tue, Wed, and Th

- **Class runs for SIX half days**
  - Tuesday, September 15 through Thursday, September 17, 2020
  - ***AND,*** Tuesday, September 22 through Thursday, September 24, 2020
- **Each day**
  - Lecture 1: 90 minutes from 12noon until 1:30pm ET
    - Please use "CHAT" for questions ***during*** the lecture
  - Open Q&A 1: 30 minutes from 1:30pm until 2:00pm ET
    - Will address unanswered questions from chat
  - Mandatory break: 30 minutes from 2:00pm ET until 2:30pm ET
    - Everyone needs a bit of a break!
  - Lecture 2: 90 minutes from 2:30pm until 4:00pm ET
    - Please use "CHAT" for questions ***during*** the lecture
  - Open Q&A 1: up to 60 minutes from 4:00pm until 5:00pm ET
    - Will address unanswered questions from chat
    - Can open up for "open mic" questions

Time Conversions
9:00am PT
= Noon ET
= 5:00pm UTC
Use this to see the exact time in YOUR time zone:
IEAzure

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Course Resources, Pluralsight Access, and Alumni

- **Paul (paul@sqlskills.com) will send you an email for a FREE 30-day access to ALL SQLskills online training classes on Pluralsight**
  - No strings attached, no credit-card required
  - If you don't receive it, send mail to Paul
- **Course resources will be sent upon course completion**
- **We may want to update a slide or two, add some notes/resources based on questions and discussions, and process the recordings**
  - Please do not distribute; this is for course attendees only
  - Full details / access information will be sent upon course completion
- **Email us: Training@SQLskills.com if you have any problems finding or accessing any of your course materials**
- **And, now that you've attended one of our courses; you can ALWAYS register using the 'alumnus' discount (without quotes); we hope to see you again!**

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Course Resources

- **Course content (this slide deck)**
  - One "two-slides per side" PDF for optimal printing (save some trees!)
  - One "full slide" PDF for optimal viewing and/or online note-taking
- **Demos**
  - All instructor-led demo scripts
  - All reference scripts
- **Reference links and additional resources**
- **Online recordings for these sessions**

Please do not redistribute: These resources are for attendees only. Please respect our IP and time in creating these resources and do not share/forward.

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Recommendation:
Leverage Great Products!

SentryOne™

- Even with as much training as we will provide, you can't know everything
- SQL Server is powerful, complex, and has lots of different potential issues let third party software help!
- SQLskills partners with SentryOne because we really feel they've made the best suite of SQL Server products available
- LEARN MORE: Join Andy Yun, Principal Solutions Engineer from SentryOne on Friday, September 25, at 11:00am PT / 2:00pm ET
  - **Going Beyond Just Monitoring With SentryOne**
  - https://global.gotomeeting.com/join/347894741
  - Attendees of the GoToMeeting will EACH receive:
    - SQL Sentry Premium subscription license (6 months)
    - Raffle for additional SentryOne gift pack
  - Plus, get *your* questions answered!
    - Email Andy (*no later than September 24 at 11am PT*) your specific monitoring questions
    - **MailTo: ayun@sentryone.com**

SQL Server Monitoring

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IEAzure

- **This course is about knowing:**
  - Understanding Azure and the Azure Fabric
  - How to set up an Azure Virtual Machine with SQL Server
  - Methods for migrating from on-premises to Azure VMs
  - Understanding and using Azure SQL Database
  - Methods for migrating to Azure SQL Database
  - Understanding and using Azure SQL Database Managed Instance
  - Understanding and using Azure Security features
  - Administration and scheduling options
  - Exploring other Azure features related to the data platform

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Author/Instructor: Tim Radney

- **Consultant/Trainer/Speaker/Author**
- **Principal Consultant, SQLskills.com**
  - Email: Tim@SQLskills.com
  - Blog: https://www.SQLskills.com/blogs/Tim
  - Blog: http://www.timradney.com
  - Twitter: @TRadney
- **Microsoft Data Platform MVP**
- **Chapter Leader "Columbus GA SQL Users Group"**
- **PASS Regional Mentor "South East USA"**
- **Outstanding PASS Volunteer**
- **Regular presenter at worldwide conferences on administration, disaster recovery, performance tuning, and Azure**
- **I like to garden, raise chickens, and volunteer with the Boy Scouts**

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M1: Azure Overview and the Azure Fabric

- Azure Storage
- Networking
- Azure Portal and Marketplace
- Overview of Tools for Connecting and Monitoring

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M2: Azure Virtual Machines

- Azure Overview
- Networking options
- Active Directory Integration from on-premises
- Deploying Azure VMs and installing SQL Server on Azure VMs
- Maintenance considerations for SQL Server
- HA/DR options and how you can extend on-premises to Azure
- Performance scaling compared to on-premises
- Billing and licensing considerations

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M3: Migrating to Azure Virtual Machines

- Collecting on-premises data for sizing
- Benchmarking Azure virtual machines
- Choosing the correct size virtual machine
- Migration strategies
- Pros and cons

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M4: Azure SQL Database

- Overview
- Features
- Missing options
- Azure pricing
- Creating Azure SQL Databases
- Maintenance considerations
- Automation
- Monitoring and alerting

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M5: Migrating to Azure SQL Database

- DTU Calculator
- Migrating databases to Azure SQL Database
- Tuning options
- Connectivity
- Azure Data Studio

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M6: Azure SQL Database Managed Instance

- Managed Instance
- What sets Managed Instance apart?
- Migrating to Managed Instance
- Additional features
- Technical specs
- Pricing
- Migration Methods

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M7: Azure Security

- Azure Security Center
- Operational Insights
- Log Analytics
- Vulnerability Assessments
- Data Classification
- Threat Detection

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M8: Administration/Scheduling

- Azure Automation
- Elastic jobs
- Powershell

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M9: Additional Azure Features

- Azure SQL Data Warehouse
- Azure Data Factory
- Azure Analysis Services
- Power BI

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