

SQLdays konferenz



2 Tage, 4 Tracks, 36 Sessions, 26 Speaker

SQL Server effizienter administrieren

Standardisieren und Automatisieren

Björn Peters
Senior Consultant
Microsoft Data Platform & Azure



Veranstalter





Björn Peters

Kramer&Crew

Senior Consultant Microsoft Data-Platform

SQL Server seit Version 6.5

Azure Meetup Hamburg Organizer

PASS Deutschland e.V. Member

Volunteer, Speaker, MVP

Father, Husband, Snowboarder, Cyclist, Geek

www.sql-aus-hamburg.de

[@SQL aus HH](https://twitter.com/SQL_aus_HH)

bpeters@kramerundcrew.de



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Eckdaten Anforderungen



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Um was geht es ???

3 Standorte

3 Umgebungen je Standort

6 x SQL Server Cluster je Umgebung = 108 SQL Server

SQL Server 2017 auf Windows

Nur DB-Engine

Kein Patching

nur frisches Rollout



PowerShell !!! Desired State Configuration



Demo

A large crowd of people is gathered on a city street, likely for a demonstration or protest. The crowd is dense, filling the street and sidewalks. Many people are holding up signs and banners. Visible signs include "2 Av" (a street sign), "NO STANDING ANYTIME" (a traffic sign), "WOMEN PLANET NASTY", "DON'T PUT PRESIDENT", "Don't Put Us", "WOMEN", and "GRAND FIFTY PLANNED PARENTHOOD". The scene is set in an urban environment with trees and buildings in the background. The word "Demo" is overlaid in large, orange, sans-serif font across the center of the image.

Deklarative Plattform

Konfiguration

Ressourcen

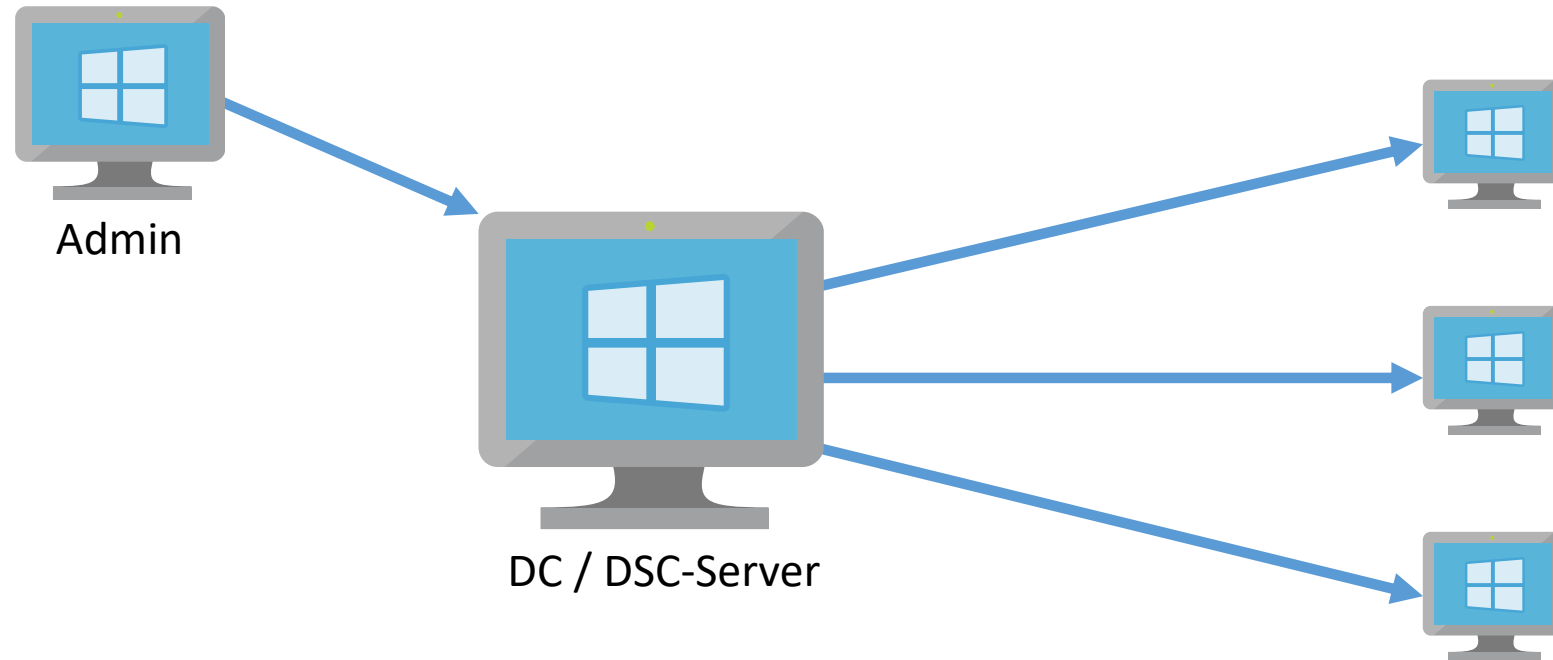
Local
Configuration
Manager
(LCM)



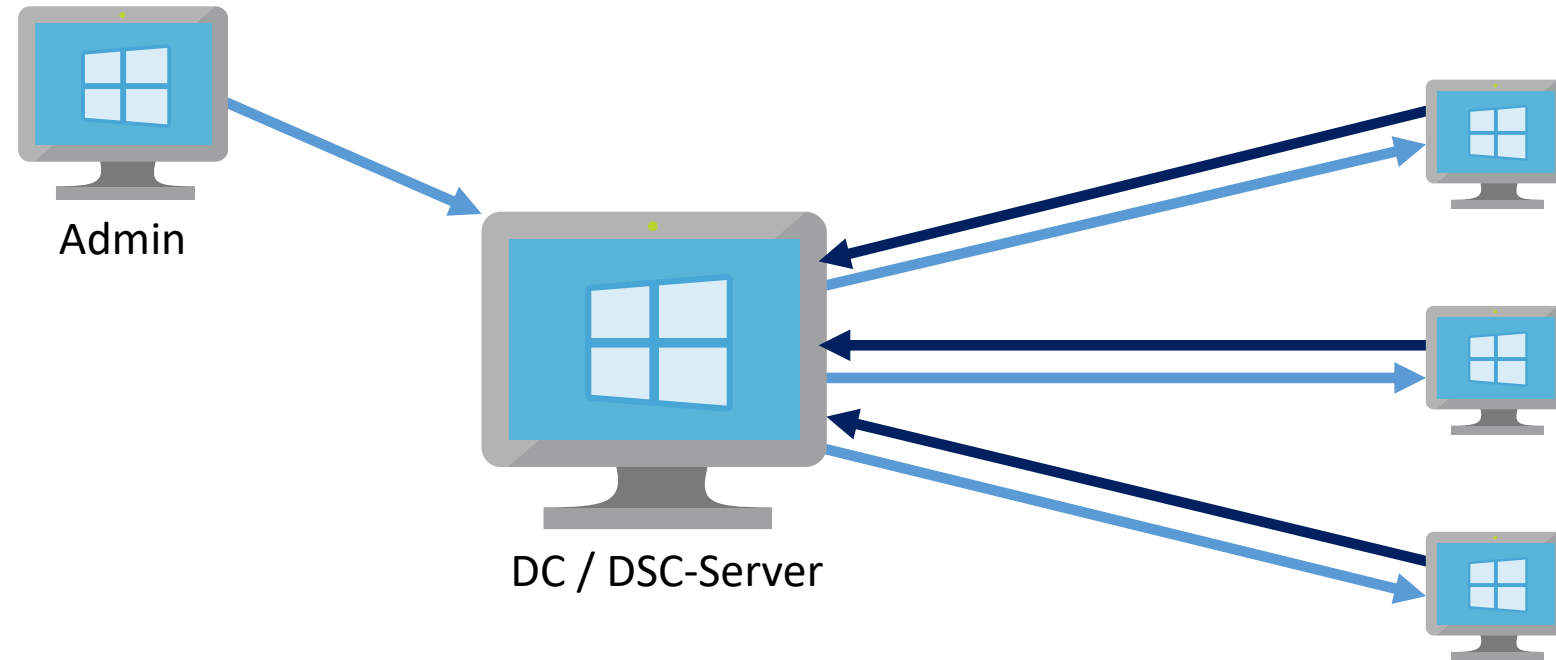
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Push - Mode



Pull - Mode



DSC Ressourcen

```
Service [String] #ResourceName
{
    Name = [string]
    [BuiltInAccount = [string]{ LocalService | LocalSystem | NetworkService }]
    [Credential = [PSCredential]]
    [Dependencies = [string[]]]
    [DependsOn = [string[]]]
    [Description = [string]]
    [DisplayName = [string]]
    [Ensure = [string]{ Absent | Present }]
    [Path = [string]]
    [PsDscRunAsCredential = [PSCredential]]
    [StartupType = [string]{ Automatic | Disabled | Manual }]
    [State = [string]{ Running | Stopped }]
}
```



Konfigurationen

```
Configuration MyDscConfiguration {  
  Node "TEST-PC1" {  
    WindowsFeature MyFeatureInstance {  
      Ensure = 'Present '  
      Name = 'RSAT'  
    }  
    WindowsFeature My2ndFeatureInstance {  
      Ensure = 'Present '  
      Name = 'Bitlocker'  
    }  
  }  
}  
MyDscConfiguration
```



LCM - Konfiguration

```
LocalConfigurationManager {  
    ConfigurationMode = "ApplyAndAutocorrect"  
    CertificateID = "71AA68562316FE3F73536F1096B85D66289ED60E"  
    Credential = $cred  
    RebootNodeIfNeeded = $true  
    AllowModuleOverwrite = $false  
    [...]  
}
```



LCM Konfiguration - Fallstrick "ConfigurationMode"

ApplyOnly

ApplyAndMonitor

ApplyAndAutoCorrect



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A large crowd of people is gathered on a city street, likely for a Women's March demonstration. The crowd is dense, filling the street and sidewalks. Many people are holding signs, including one that says "WOMEN'S MARCH" and another that says "WOMEN'S MARCH". The word "Demo" is overlaid in large, bold, orange letters across the center of the image. The background shows city buildings and a street sign for "2 Av". The overall atmosphere is one of a large-scale public gathering.

Flexibilität

externes File
(JSON)

Parameter



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A large crowd of people at a demonstration, with various protest signs visible. The word "Demo" is overlaid in large, bold, orange letters. The background shows a dense crowd of people, many wearing hats and holding signs. Some visible signs include "NO STANDING 8AM-7PM", "NO MORE PRESIDENT", "Don't [unclear] Us", and "STAND WITH PLANNED PARENTHOOD". The word "Demo" is written in a large, bold, orange font across the center of the image.

Voraussetzungen SQL Server Installation

- aktuelles .Net-Framework
- Installationsmedien
 - Setup
 - Servicepack / CumulativeUpdate
- Weitere Powershell-Module
 - z.B. dbatools



DSC – Setup-Möglichkeiten

Script-Ressource

- Setup.exe mit ConfigFile.ini

DSC-Ressource

- SQLSetup mit direkten Parametern



DSC – Möglichkeiten für Konfiguration

Script-Ressource

- Powershell-Skript(e)
- T-SQL Skript(e)

DSC-Ressource

- SqlServerDsc
- SecurityPolicyDsc



A large crowd of people at a protest, with the word "Demo" overlaid in large orange letters. The background shows a dense crowd of people, many holding signs. Visible signs include "NO STANDING 8am-7pm", "NO MORE PRESIDENT", "Don't [unclear] Us", and "STAND WITH PLANNED PARENTHOOD". The word "Demo" is written in a large, bold, orange sans-serif font across the center of the image.

Fragen?



Quest

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Kramer&Crew

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bpeters@kramerundcrew.de



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Vielen Dank!

Ich freue mich auf Feedback! Euer Björn

