

IT Service Automation

Unsere Praxis

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BBRZ Gruppe

Berufliche Rehabilitation

Berufliche Integration

Berufliche Bildung





BBRZ

MitarbeiterInnen:

Staff: 2.730

TeilnehmerInnen:

110.000 Personen

Umsatz:

236 Mio



6 verwaltungstechnische Regionen, 56 Gemeinden, 138 Standorte



PowerShell Usergroup Österreich



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Agenda

Überblick

Architektur

Service Manager

Orchestrator

PowerShell





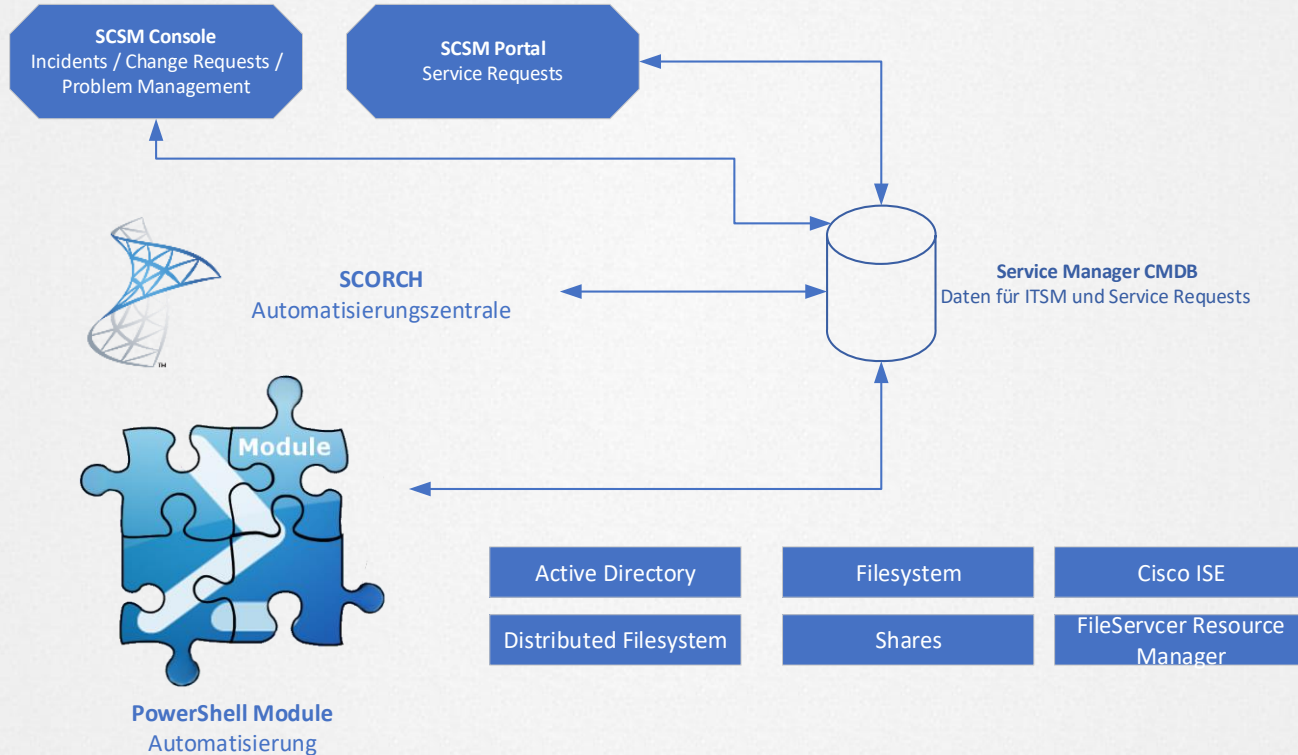
Zahlen, Daten, Fakten

Jänner – Oktober 2017: (304 Tage)

- 25 IT MitarbeiterInnen
- 4.686 Service Requests (voll automatisiert)
- 21.895 Incident Requests
- 186 Change Requests
- 11.678 Computer Objekte
- 1.495 Gruppenlaufwerke
- 143 IT Standorte
- 135 IT Dienstleistungen



Architektur





Versionen

System Center Service Manager 2012R2 UR8 + UR9

System Center Orchestrator 2012R2

PowerShell 5.1

SMLets 0.1

Windows Server 2012R2

SQL Server 2012





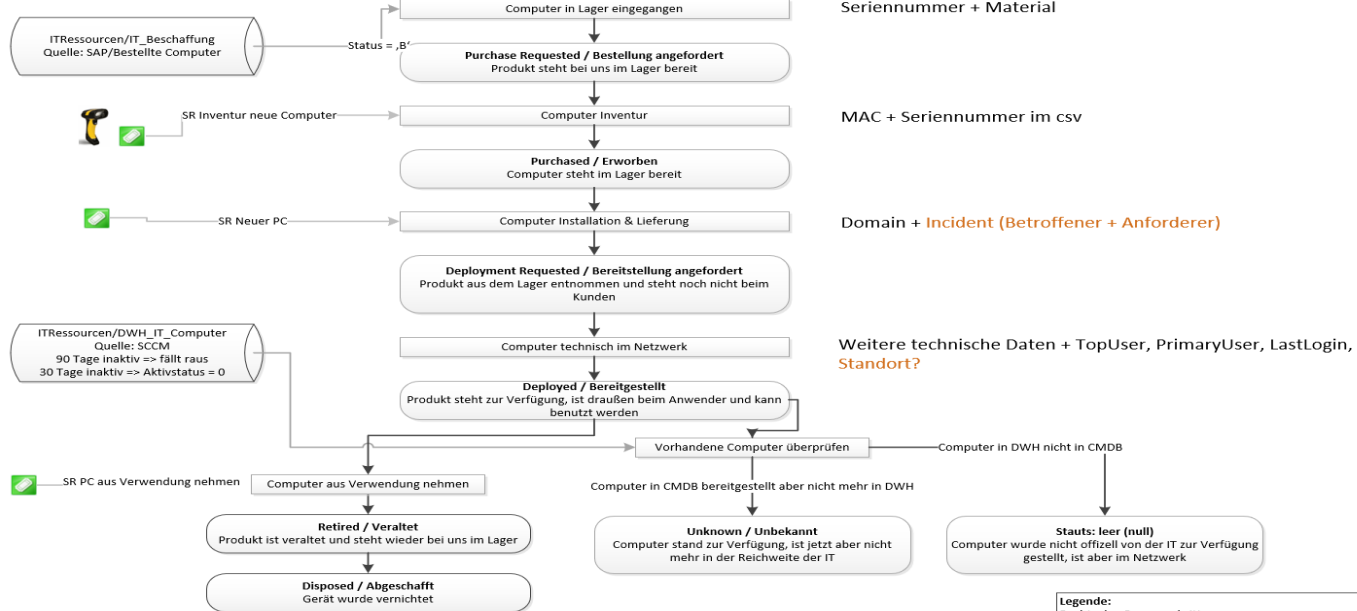
Service Manager Console

- Incidents
- Change Requests
- Problem Management
- ITSM – CMDB
 - Incidents
 - Service Requests

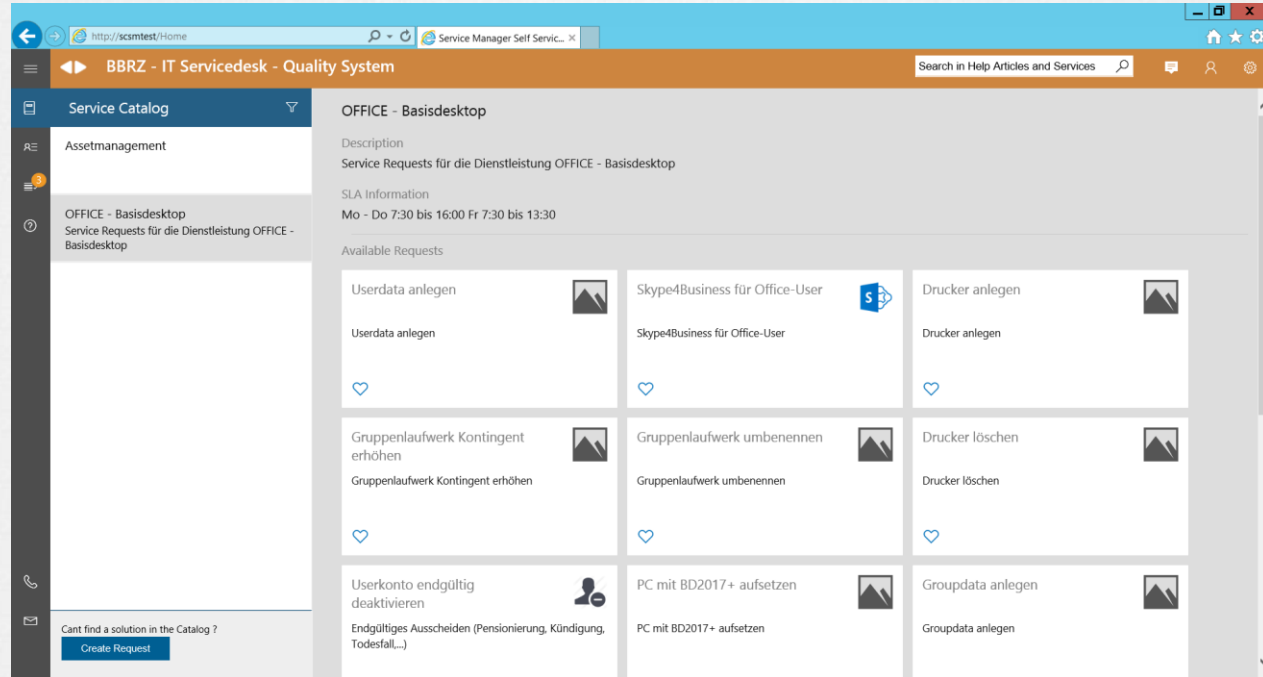


Computerstatus – grob

Lebenszyklus Computer in SCSCM



Service Manger Portal



The screenshot displays the Service Manager Self Service Portal. The browser address bar shows <http://scsmtest/Home>. The page title is "BBRZ - IT Servicedesk - Quality System". A search bar on the right contains the text "Search in Help Articles and Services".

The left sidebar features a "Service Catalog" section with a dropdown arrow. Below it, the "Assetmanagement" section is visible. The "OFFICE - Basisdesktop" section is highlighted, showing "Service Requests für die Dienstleistung OFFICE - Basisdesktop". At the bottom of the sidebar, a message states "Cant find a solution in the Catalog ?" with a "Create Request" button.

The main content area is titled "OFFICE - Basisdesktop". It includes a "Description" section with the text "Service Requests für die Dienstleistung OFFICE - Basisdesktop", an "SLA Information" section with the text "Mo - Do 7:30 bis 16:00 Fr 7:30 bis 13:30", and an "Available Requests" section. This section contains a grid of request cards, each with a title, a description, and a heart icon:

- Userdata anlegen**: Userdata anlegen
- Skype4Business für Office-User**: Skype4Business für Office-User
- Drucker anlegen**: Drucker anlegen
- Gruppenlaufwerk Kontingent erhöhen**: Gruppenlaufwerk Kontingent erhöhen
- Gruppenlaufwerk umbenennen**: Gruppenlaufwerk umbenennen
- Drucker löschen**: Drucker löschen
- Userkonto endgültig deaktivieren**: Endgültiges Ausscheiden (Pensionierung, Kündigung, Todesfall,...)
- PC mit BD2017+ aufsetzen**: PC mit BD2017+ aufsetzen
- Groupdata anlegen**: Groupdata anlegen





Orchestrator

- Automation Service Requests
- Automation Service Manager
- Automation Infrastruktur



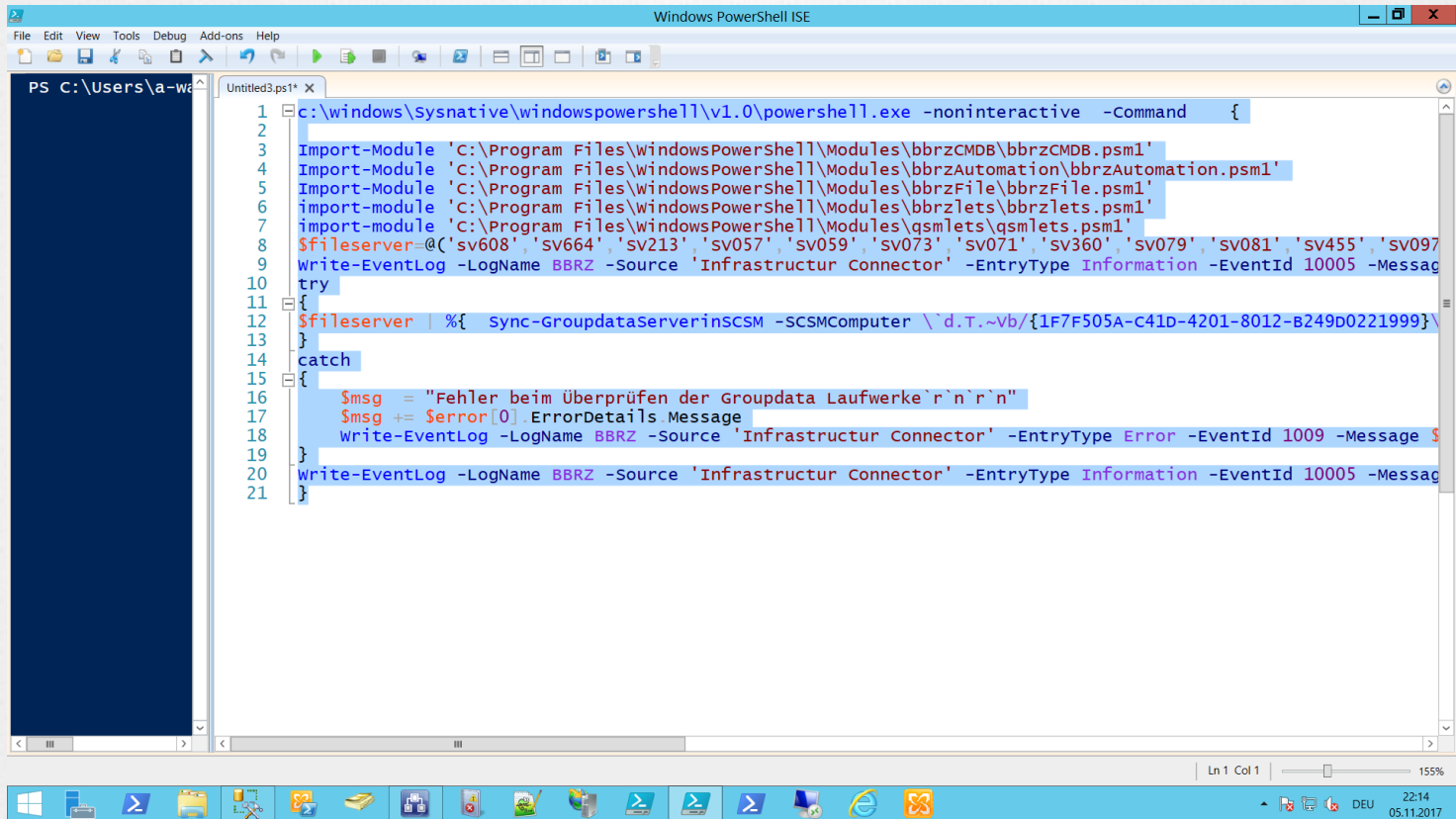
Orchestrator - Demo

The screenshot displays the 'System Center 2012 Orchestrator Runbook Designer' application. The interface is divided into several sections:

- Left Pane (Connections):** A tree view showing the hierarchy of runbooks. The 'SV600' folder is expanded, revealing sub-folders like '01 Release', '02 Test', '03 Development', '04 Basteln', and 'Computer Groups'. Each folder contains a list of runbooks, such as '1 Allgemein', '3 SR Runbooks', '7 Runbooks', '9 Automation', 'A Checks v1.3', 'B Imports v2.0.1', 'C Imports', and 'D Periodisches v1'.
- Central Canvas:** A workspace for designing runbooks. It shows a simple flow diagram with two steps: 'Monitor Date/Time' (represented by a calendar icon) and 'Computer abgleichen' (represented by a document icon), connected by a right-pointing arrow.
- Right Pane (Activities):** A list of available activities for the runbook. The 'System' category is selected, showing activities like 'End Process', 'Get SNMP Variable', 'Monitor SNMP Trap', 'Query WMI', 'Restart System', 'Run .Net Script', 'Run Program', 'Run SSH Command', 'Save Event Log', 'Send SNMP Trap', 'Set SNMP Variable', and 'Start/Stop Service'. Other categories like 'Scheduling', 'Monitoring', 'File Management', 'Email', 'Notification', 'Utilities', 'Text File Management', 'Active Directory', 'SC 2012 Service Manager', 'Exchange Admin', 'Exchange User', and 'Runbook Control' are also visible.
- Bottom Pane (Log):** A section for viewing the execution history of the runbook. It includes a 'Log' tab and a list of log entries with timestamps, such as '(Started: 05.11.2017 07:00:00)', '(Started: 15.10.2017 12:20:13)', '(Started: 15.10.2017 07:00:00)', and '(Started: 17.09.2017 07:00:00)'. Below the log, there are tabs for 'Log', 'Log History', 'Audit History', and 'Events'.



Orchestrator – Demo



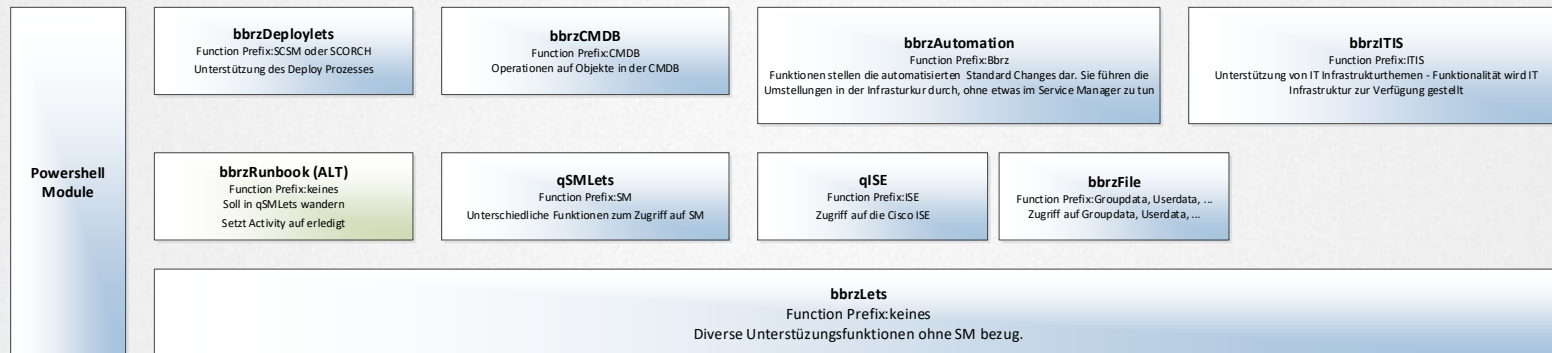
The image shows a Windows PowerShell ISE window with a script titled 'Untitled3.ps1'. The script is designed to run non-interactively and perform several tasks: import modules, define a list of servers, and check for group data in a SCSCM database. It includes error handling and logging.

```
1 c:\windows\Sysnative\windowpowershell\v1.0\powershell.exe -noninteractive -Command {
2
3 Import-Module 'C:\Program Files\WindowsPowerShell\Modules\bbrzCMDB\bbrzCMDB.psm1'
4 Import-Module 'C:\Program Files\WindowsPowerShell\Modules\bbrzAutomation\bbrzAutomation.psm1'
5 Import-Module 'C:\Program Files\WindowsPowerShell\Modules\bbrzFile\bbrzFile.psm1'
6 import-module 'C:\Program Files\WindowsPowerShell\Modules\bbrzlets\bbrzlets.psm1'
7 import-module 'C:\Program Files\WindowsPowerShell\Modules\qsmlets\qsmlets.psm1'
8 $fileservers=@('sv608','sv664','sv213','sv057','sv059','sv073','sv071','sv360','sv079','sv081','sv455','sv097')
9 Write-EventLog -LogName BBRZ -Source 'Infrastructur Connector' -EntryType Information -EventId 10005 -Message
10 try
11 {
12 $fileserver | %{ Sync-GroupdataserverinSCSM -SCSCMComputer `$_ -Vb/{1F7F505A-C41D-4201-8012-B249D0221999}
13 }
14 catch
15 {
16 $msg = "Fehler beim Überprüfen der Groupdata Laufwerke`r`n`r`n"
17 $msg += $error[0].ErrorDetails.Message
18 Write-EventLog -LogName BBRZ -Source 'Infrastructur Connector' -EntryType Error -EventId 1009 -Message $msg
19 }
20 Write-EventLog -LogName BBRZ -Source 'Infrastructur Connector' -EntryType Information -EventId 10005 -Message
21 }
```

The taskbar at the bottom shows the Windows Start button, several application icons, and the system clock indicating 22:14 on 05.11.2017.



PowerShell Module





PowerShell Automatisierung

```
#  
### Gruppenlaufwerke  
#  
get-command -Module bbrzautomation  
get-command -Module bbrzCMDB  
  
# Gruppenlaufwerke  
  
Test-BbrzGroupdata PROJ_T_SystemCenterUniverse  
  
Rename-BbrzGroupdata PROJ_T_SystemCenterUniverse PROJ_T_ExpertsLiveAT  
  
Test-BbrzGroupdata PROJ_T_SystemCenterUniverse  
  
Rename-BbrzGroupdata PROJ_T_ExpertsLiveAT PROJ_T_SystemCenterUniverse
```





PowerShell Automatisierung

```
#  
# Übliche Verwaltungsinformationen  
#
```

```
Get-BBLComputerInfo srv1
```

```
Get-PendingReboot (Get-SCSMServer)
```

```
Get-SCSMServer
```

```
Get-LoggedOnUser (Get-SCSMServer)
```

```
Get-LogonInfo -ComputerName srv2
```

```
Get-Password
```





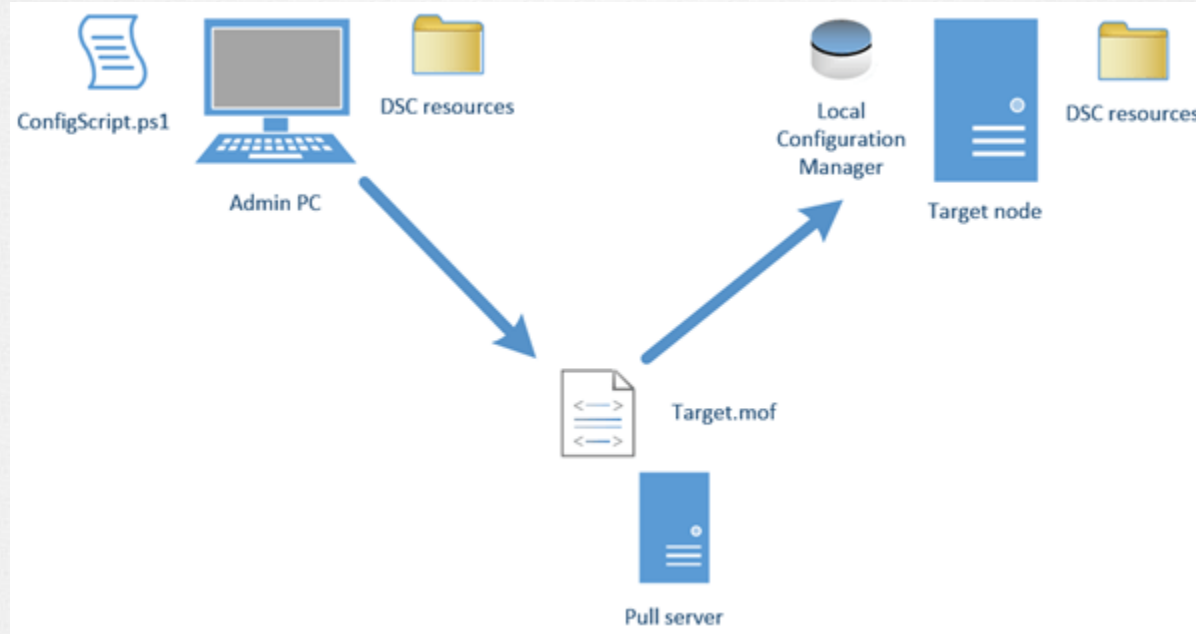
DSC – erste Tests

Geräte installieren und konfigurieren as Code

- Automatisiert
- Konsistent
- Wiederholbar



DSC – Erste Tests





Diskussion

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