Azure Automation lokal

Hybrid Cloud mit Azure Automation

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Azure Automation Hybrid

- Overview Azure Automation
  - Process Automation
  - Shared Ressources
  - Hybrid Worker
- Overview Configuration Management
  - Automation DSC

Overview Azure Automation

Process Automation

Orchestrate processes using graphical, PowerShell, and Python runbooks

Configuration Management

Collect inventory
Track changes
Configure desired state

Update Management

Assess compliance
Schedule update installation

Shared capabilities

Role based access control
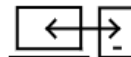Secure, global store for variables, credentials, certificates, connections
Flexible scheduling
Shared modules
Source control support
Auditing
Tags

Heterogenous

Windows & Linux
Azure and on-premises

Process Automation (Runbooks)

Detail:
- Powershell (Script oder Workflow), Python, Graphical
- Sandbox or Hybrid Worker
- **Webhook** or **Schedule**
- Development in PS ISE or VSCode
- Source control: GitHub or Azure Repos

Limitations:
- 100 Jobs/30 seconds
- Max. 10GB storage size
- Schedule Limitation (min. 1 **hour**)
- Max. 50 runbook parameters
- Max. 512 kb parameter size
- Max. 30 days job data retained

Process Automation (Watcher)

Detail:
- Watcher and Action Task
- Watcher Task only on Hybrid Worker
- Action Task in Azure or on Hybrid Worker
- Different pricing Model (750 min. Free)

Limitations:
- 100 Jobs/30 seconds
- Max. 10GB storage size
- Schedule Limitation (min. 1 **minute**)
- Max. 50 runbook parameters
- Max. 512 kb parameter size
- Max. 30 days job data retained

Shared Ressources

Detail:
- Scheduler for Runbooks
- Modules from gallery or custom
- Phyton 2 packages
- Credentials
- Connections (Azure, Azure SP)
- Certificate
- Variables

Secure assets are encryped with an unique generated key.
The key is stored in azure key vault.

Hybrid Worker

Detail:
- Runbooks running within your DC
- Require Log Analytics with Automation solution/plugin
- Support script, workflow and graphical runbooks
- No inbound firewall requirements
- Hybrid Worker Groups is a collection of workers
- Share "run as" permissions

Limitations:
- No Module Deployment
- No simple file or event triggers
- No prioritisation of workers in a group

Demo

- **Overview Process Automation**
- **AddOn in Powershell ISE**
- **Shared Ressources**
- **Hybrid Worker and RunAs Permission**
- **Create On-Prem AD User Account**
  - **Webhook**
  - **Watcher Task**

Overview Configuration Management

Automation DSC

Detail:
- Built-in pull server
- Management of all your DSC artifacts
- Import reporting data into Azure Monitor logs
- DSC is for Azure or On-Prem VMs
- No inbound firewall requirements
- Proxy Support
- Development in PS ISE or VSCode
- Configuration Mode:
  - ApplyOnly
  - ApplyAndMonitor
  - ApplyAndAutoCorrect

Demo

- **Overview Automation DSC**
- **Write and compile DSC config**
- **Assign DSC config**
- **Debug DSC config**
- **On-Prem OnBoarding Script**

Q&A