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innovation through education

NetApp-Trainings
Additional values at qSkills

NetApp-Trainings: Additional values at qSkills

ST200c | ONTAP 9.x Admin Basics

» Physical hardware AFF A220
» Optimal learning technique for beginners
» Theory & practice in a balanced ratio
» Optimised use of Netapp hardware & simulators
» Many practical exercises

ST230c | Performance Analysis on Clustered Data ONTAP

» No recourse to simulators and one separate node per participant
» Handling of real IO loads for predictions
» Consideration of the entire environment incl. network and client analysis
» Practical exercises regarding physical limits and configuration errors with real effects
» Many practical examples incl. checklists

ST217c | ONTAP 9.x - NAS Advanced incl. Troubleshooting

» Discussing of the protocols CIFS and NFS as powerful analysis tools
» Consideration of the operating systems Unix and Windows
» File system specifics and user management
» Additional important commands for troubleshooting and performance analysis
» Time for many questions and exercises

ST251c | Implementing VMware vSphere on NetApp

» Focus on added value of the combination of VMware vSphere and ONTAP
» vSphere 7 and vSphere 8 based
» Labs for configuring iSCSI, NFS, NVMe over TCP
» Restore from NetApp snapshots
» Best practice exercises

ST221c | ONTAP 9.x Data Protection & High Availability

» Detailed treatment of MetroCluster
» Conducting MetroCluster exercises on physical hardware (both FC and IP)
» Test different scenarios
» Many practical exercises

ST260c | NetApp SAN Implementation incl. Brocade

» Detailed treatment of SAN
» Setup of a storage area network incl. connecting servers
» Integration with VMware
» Practical exercises with physical hardware (GEN7, GEN6, GEN5)

NetApp-Trainings: Additional values at qSkills

ST269c | ONTAP 9.x NAS- & SAN Automation with Ansible

» Focus on automation with Ansible
» Various graphical frontends of Ansible with their strengths and weaknesses
» Empowerment to increase efficiency, reduce error sources, administration in inventory
» Always the latest updates, features and bug fixes
» Tips for switching from WFA to Ansible

ST274c | MetroCluster 9.x Install & Configure (IP)

» Physical hardware (AFF A220 and BES switches) including physical cabling
» Implementing, updating and migration of a MetroCluster IP
» Practical exercises on Mediator and ClusterLion (troubleshooting)
» Performance tests (WAN simulator, range test)
» Reconstruction after a complete site loss
» 8-node MCIP LAB

ST290 | StorageGRID Installation and Administration

» Physical StorageGRID hardware (4x SG5712 and 1x SG100)
» Practical exercises regarding installation, extension, upgrade, patching
» Integration and practical application of a fabric pool
» Setup a fabric pool with physical hardware systems
» Additional recovery exercises

ST291 | StorageGRID Troubleshooting

» Physical StorageGRID hardware (4x SG5712 and 1x SG100)
» Troubleshooting:
  » expansion problems
  » decommission problems
  » upgrade problems
» Analysing performance problems
» Additional

ST294 | Kubernetes Astra Trident / Control & AI Control Plane

» Complete configuration of multiple Kubernetes clusters from Scratch
» SAN economy and NAS economy storage classes (lab and theory)
» Use of the latest versions of Kubernetes, Astra Control, Astra Trident and Data Science Toolkit
» Lab on Astra Control and Metrocluster IP / Longhorn
» Astra Control DR
» Troubleshooting
» Lab on the setup of Ontap Select

ST295c | Integr. Hybrid Clouds with AWS, Azure and Google

» ONTAP Select
» Fully meshed network between AWS, Azure, GCP and onprem
» Practical exercises for cloud products in different clouds incl. HA
» One physical ESX server per participant
» Performance tests
» Active Directory connection for CVS, FSx ONTAP, CVO

Further Trainings: Additional values at qSkills

ST101 | Brocade FOS 8.x / 9.x Admin Basics

» Short Demo SANnav 2.3.0
» Server connection to SAN environment (Windows, VMware, Linux)
» Latest hardware (Gen 7: 64 Gb and Gen 6: 32 Gb)
» Latest software (FOS 9.x)
» Application with NetApp Storage

ST104 | Brocade FOS 8.x / 9.x Admin Advanced

» Troubleshooting is a key topic
» Detailed information on FC-NVMe with practical exercises
» Demo on MAPS configuration and Flow Vision with SANnav
» Exercises with SANnav on MAPS and Flow Vision
» Latest hardware (Gen 7: 64 Gb and Gen 6: 32 Gb)
» Latest software (FOS 9.x) and SANnav 2.3.0
» Application with NetApp Storage

ST108 | SANnav 2.3 Installation and Administration

» Installation of SANnav and practical exercise
» Each participant has their own practice environment!
» Detailed treatment of almost all menus and masks of SANnav with practical exercises
» Latest hardware (Gen 7: 64 Gb and Gen 6: 32 Gb)
» Latest software (FOS 9.x) and SANnav 2.3.0
» Application with NetApp Storage

BR418 | Veeam v12 (VMCE) with Storage-Connection

» Overview of the advantages of storage snapshots for backups
» Backup & restore of vSphere VMs and shares of NetApp volumes
» Combination of NetApp replication & Veeam backup
» Connection to Veeam

BR516 | Commvault® V11 Applic. & VM Backup incl. Storage-Connection

» Covering advanced Commvault configuration parameters and features beyond the basic courses
» Detailed consideration and best practice exercises on the recovery options of the agents covered
» Practical exercises on IntelliSnap integration and replication (using NetApp as an example)
» Practical exercises on VMware backup/restore with NetApp snapshot functions

VI220 | Proxmox Virtualization incl. Storage-Connection

» Physical lab environment (Zen 3, 192 cores, 1.5 TB RAM, 48 TB NVMe, 10 Gbit/s Internet connection, dual stack, Arista switch)
» Practical exercises on all topics
» Migration from Physics, Hyper-V and VMware to Proxmox
» Physical NetApp AFF A220 storage
» Setup of a highly available NFS storage with DRBD

Hands-On Trainings: Additional values at qSkills