

Sample Site Survey and Planning worksheet

ONTAP FLI

NetApp February 11, 2024

Table of Contents

Sa	Imple Site Survey and Planning worksheet	1
	Sample Site Survey and Planning worksheet	1
	Site Survey and Planning worksheet Contacts tab	1
	Site Survey and Planning worksheet Questionnaire tab	1
	Site Survey and Planning worksheet Switches tab	3
	Site Survey and Planning worksheet Source Storage Devices tab	3
	Site Survey and Planning worksheet Destination Storage Devices tab	4
	Site Survey and Planning worksheet Hosts tab	5
	Site Survey and Planning worksheet HBA and Zone Information tab	6
	Site Survey and Planning worksheet Source LUNs tab	6
	Site Survey and Planning worksheet Storage Groups tab	7
	Site Survey and Planning worksheet LUN Details tab	8
	Site Survey and Planning worksheet NetApp LUN Layouts tab	. 10
	Site Survey and Planning worksheet Migration Schedule tab	. 10
	Site Survey and Planning worksheet Aggregate Status tab	. 10
	Site Survey and Planning worksheet FAS Config tab	. 11
	Site Survey and Planning worksheet SDS CLI Scripts tab.	. 11

Sample Site Survey and Planning worksheet

Sample Site Survey and Planning worksheet

During the analysis and planning phases of the migration methodology you will need to document your existing configuration, target configurations, gaps, and remediation plans using a Site Survey and Planning worksheet.

This section provides examples of types of information the Site Survey and Planning spreadsheet should contain. The following tabs are recommended:

- Contact
- Questionnaire
- Switches
- · Storage Devices (Source)
- · Storage Devices (Destination)
- Hosts
- · HBA and Zone Information
- Source LUNs
- Storage Groups
- LUN Details
- NetApp LUN Layouts
- · Migration Schedule
- · Aggregate Status
- · FAS Config
- · SDS CLI Scripts

Site Survey and Planning worksheet Contacts tab

As part of your Site Survey and Planning worksheet, you should set up a tab containing migration project contact information.

The following is an example of how to set up your Contacts tab.

Migration Project Contact Information						
Resource Name	Organization	Project Role	Office Phone	Cell Phone	Email	

Site Survey and Planning worksheet Questionnaire tab

As part of your Site Survey and Planning worksheet, you should have a tab containing migration project information from your initial migration questionnaire.

The following is an example of how to set up your Questionnaire tab.

Migration Project Information		
Project Type	☐ Data Migration ☐ Other	
Data Migration Objectives	[Objectives]	
Source Devices	Storage: [Storage Type] No. of Devices: [No. of arrays] Thin-provisioned: □ Yes □ No	Enumerate all devices
Client Devices	Operating System: [OS Version] SAN boot: □ Yes □ No MPIO: [MPIO Version] HBAs: [HBA Vendor, Model, Firmware]	
Fabric Switches	Vendor: Model: Firmware: No. of Ports:	
Current Protocols	□ FCP □ iSCSI	
Volume Manager	Vendor: Product: Version:	
Destination Devices (Storage)	Storage: [Storage] No. [Number] Thin-provisioned: □ Yes □ No	For this service, NetApp filers only
Amount of Datato be Migrated (in TB)	[Amount of Data]	Summary and detail (each source device)

Migration Project Information		
Number of LUNs	[Number of LUNs]	Summary and detail (each source device)
Data Reorganization	□ Yes□ No	Does the customer desire to move volumes/directories/folders/files into different data structures as part of the migration?
Outage Expectations	Outage Window □ Pre-defined □ Flexible Standard Maintenance window polices : [Info]	Number and durations of outages that can be utilized. Please list maintenance windows, if any.
Desired Time frame for Completion	[Desired Time frame for Completion][Time Sensitivities]	
Other Relevant Information	[Other Relevant Information]	
Customer Organization Name and Location (City and State)		

Site Survey and Planning worksheet Switches tab

As part of your Site Survey and Planning worksheet, you should set up a tab containing migration switch information.

The following is an example of how to set up your Switches tab.

Switches							
							NetApp Recommen ded
Host Name	IP Address	Vendor	Model	Fabric Name	VSAN/Dom ain	Firmware	Firmware
C9506-1-A	10.x.x.x	Cisco	9506	Prod A	10	3.3(5a)	

Site Survey and Planning worksheet Source Storage Devices tab

As part of your Site Survey and Planning worksheet, you should have a tab containing

information on your migration source storage devices.

The following is an example of how to set up your Source Storage Devices tab.

Storage Systems							
Array Name	IP Address	Vendor	Array Model	Microcode FW/ ONTAP			
AMS2100	10.x.x.x	Hitachi	AMS 2100	0893/B-X			
AMS2100	10.x.x.x	Hitachi	AMS 2100	0893/B-X			
AMS2100	10.x.x.x	Hitachi	AMS 2100	0893/B-X			
AMS2100	10.x.x.x	Hitachi	AMS 2100	0893/B-X			

Storage Systems							
Controller/Node	Port Name	WWPN	Fabric Name	Target Type			
Controller0	0a	50060E80xxxxxxxx	Production Fabric A	Source			
Controller0	0e	50060E80xxxxxxxx	Production Fabric B	Source			
Controller1	1a	50060E80xxxxxxxx	Production Fabric A	Source			
Controller1	1e	50060E80xxxxxxxx	Production Fabric A	Source			

Site Survey and Planning worksheet Destination Storage Devices tab

As part of your Site Survey and Planning worksheet, you should have a tab containing information on your destination storage devices.

Storage Systems							
Cluster Name	IP Address	Array Mode	ONTAP	vserver	Port Type		
DataMig-cDOT	10.x.x.x	FAS8080	8.3.1	datamig	Target		
DataMig-cDOT	10.x.x.x	FAS8080	8.3.1	datamig	Target		
DataMig-cDOT	10.x.x.x	FAS8080	8.3.1	DataMig-01	Initiator		

Storage Systems							
DataMig-cDOT	10.x.x.x	FAS8080	8.3.1	DataMig-01	Initiator		

Storage Systems							
Port Name	LIF Name	WWPN	Fabric Name	Target Type			
0c	miglif1	20:01:00:a0:98:2f:xx :xx	Prod A	Target			
Od	miglif2	20:01:00:a0:98:2f:xx :xx	Prod B	Target			
0a	n/a	50:0a:09:81:00:xx:xx :xx	Prod A	Target			
Ob	n/a	50:0a:09:81:00:xx:xx :xx	Prod B	Target			

The following is an example of how to set up your Destination Storage Devices tab.

Site Survey and Planning worksheet Hosts tab

As part of your Site Survey and Planning worksheet, you should set up a tab containing migration project host information.

The following is an example of how to set up your Hosts tab.

Hosts								
Current	NetApp Recommended							
Host Name	Driver	Firmware	HUK	MPIO	SnapDrive	SnapManag er	Hotfixes	
dm- rx200s6-21								
dm- rx200s6-22								
dm- rx200s6-20								

Site Survey and Planning worksheet HBA and Zone Information tab

As part of your Site Survey and Planning worksheet, you should set up a tab containing information on your HBA and zone information.

The following is an example of how to set up your HBA and Zone Information tab.

Fabric Details						
Host Name	Description	WWPN	Fabric Name			
dm-rx200s6-21	НВА0	21:00:00:24:ff:xx:xx:xx	Prod A			
dm-rx200s6-21	HBA1	21:00:00:24:ff:xx:xx:xx	Prod B			

Fabric Details				
VSAN/Domain	Port Number	Pre-migration Zone Membership	Post-migration Zone Membership	
10	fc2/3	rx21_AMS2100	rx21_flicDOT	
10	fc2/3	rx21_AMS2100	rx21_flicDOT	

Site Survey and Planning worksheet Source LUNs tab

As part of your Site Survey and Planning worksheet, you should set up a tab containing information on your source LUNs.

The following is an example of how to set up your Source LUNs tab.

Source LUNs					
Masked LUNs					
Storage Group Host LUN ID Array LUN ID Thick/Thin UID Name					
dm-rx200s6-21	0	30	Thick	60060e801046b960 04f2bf460000001e	
dm-rx200s6-21	1	14	Thick	60060e801046b960 04f2bf460000000e	

Source LUNs				
dm-rx200s6-21	2	15	Thick	60060e801046b960 04f2bf460000000f

Source LUNs				
All LUNS .2a				Custom Prefix
LUN Name	UID	Starting Sector	Partition Offset	
LUN30			368050176	0
LUN14			33619968	0
LUN15			33619968	0

Site Survey and Planning worksheet Storage Groups tab

As part of your Site Survey and Planning worksheet, you should have a tab containing information on your storage groups.

The following is an example of how to set up your Storage Groups tab.

Storage Groups	Storage Groups				
Source	Source				
Host Name	Storage Group	WWPN	iGroup Commands		
dm-rx200s6-21	dm-rx200s6-21	21:00:00:24:ff:30:14:c521: 00:00:24:ff:30:14:c4	igroup create -ostype windows -protocol fcp -vserver datamig -igroup dm-rx200s6-21 -initiator 21:00:00:24:ff:30:14:c4,21 :00:00:24:ff:30:14:c5		
dm-rx200s6-22	dm-rx200s6-22	21:00:00:24:ff:30:04:8521: 00:00:24:ff:30:04:84	igroup create -ostype linux -protocol fcp -vserver datamig -igroup dm-rx200s6-22 -initiator 21:00:00:24:ff:30:04:85,21 :00:00:24:ff:30:04:84		

Storage Groups				
dm-rx200s6-20	dm-rx200s6-20	21:00:00:24:ff:30:03:ea21 00:00:24:ff:30:03:eb	igroup create -ostype vmware -protocol fcp -vserver datamig - igroup dm-rx200s6-20 -initiator 21:00:00:24:ff:30:03:ea,2 :00:00:24:ff:30:03:eb	

Site Survey and Planning worksheet LUN Details tab

As part of your Site Survey and Planning worksheet, you should have a tab containing information on your LUN details.

The following is an example of how to set up your LUN Details tab.

LUN Details	LUN Details				
Source					
Host Name	Storage Group	Operating System	Clustered	Storage Controller	
dm-rx200s6-21	dm-rx200s6-21	Microsoft Windows Server 2012 R2 Datacenter	No	AMS2100	
dm-rx200s6-22	dm-rx200s6-22	Red Hat Enterprise Linux Server release 5.10	No	AMS2100	
dm-rx200s6-20	dm-rx200s6-20	ESXi 5.5.0 build- 1331820	No	AMS2100	
dm-rx200s6-20	dm-rx200s6-20	ESXi 5.5.0 build- 1331820	No	AMS2100	

LUN Details					
Source					
Mount Point	Physical Drive Number	Port	Bus	Target	
C:	PHYSICALDRIVE0	2	0	0	

LUN Details				
1	sda	0	0	0
BootLUN_Datastore	naa.60060e801046b 96004f2bf46000000 14	0	0	0
VM_Datastore	naa.60060e801046b 96004f2bf46000000 15	0	0	0

LUN Details					
Source					
LUN	PG80 SN	PG83 SN / UID	LUN Size (GB)	Starting Offset	
0		60060e801046b960 04f2bf460000001e	40	0	
0		60060e801046b960 04f2bf4600000010	20		
0		60060e801046b960 04f2bf4600000014	20		
1		60060e801046b960 04f2bf4600000015	40		

LUN Details				
Source				
LUN Type	Aligned	Custom Prefix (Blocks)	Custom Prefix (Bytes)	
windows	Aligned	0	0	
linux	Aligned	0	0	
vmware	Aligned	0	0	
vmware	Aligned	0	0	

Site Survey and Planning worksheet NetApp LUN Layouts tab

As part of your Site Survey and Planning worksheet, you should set up a tab containing information on your LUN layouts.

The following is an example of how to set up your NetApp LUN Layouts tab.

NetApp LUN Information								
Storage Controller	Aggregate	Volume Name	Volume Size	Volume Guarantee	Snap Reserve	LUN Name		
NetApp LUN	NetApp LUN Information							
S/N	LUN Type	Custom Prefix	LUN Description	GB Size	LUN Reservation	Fractional Reserve		
NetApp LUN	NetApp LUN Information							
Volume Autosize	Snap Auto Delete	iGroup	LUN ID	Host Type	Drive Letter	Host		

Site Survey and Planning worksheet Migration Schedule tab

As part of your Site Survey and Planning worksheet, you should have a tab containing information on your migration schedule.

The following is an example of how to set up your Migration Schedule tab.

Migration Schedule							
Migration Date	Host	OS	Application	Storage Controller	LUN UID	LUN Size	Status

Site Survey and Planning worksheet Aggregate Status tab

As part of your Site Survey and Planning worksheet, you should have a tab containing information on your aggregate status.

The following is an example of how to set up your Aggregate Status tab.

NetApp Aggregate Information						
Controller	Aggregate	Total Size (GB)	Used Capacity (GB)	Available (GB)	Previous to Build out	

Site Survey and Planning worksheet FAS Config tab

As part of your Site Survey and Planning worksheet, you should have a tab containing information on your FAS configuration.

The following is an example of how to set up your FAS Config tab.

Cluster Name		Cluster Management IP Address		Cluster Management Credentials Available		ONTAP System Manager Host			
						IP Add	Iress		edentials railable
Network Ports									
Node	Node Interface Name		Port type I		Port speed		VLAN Name/ID		IFGRP
SVM Name		Туре		Protocols		Aggregate		SVM Root Volume	
SVM		Volume		Aggregate		Size		SAN	
						LUN Name		LUN Size	
SVM Network In	nterfa	aces							
SVM	Interface Name		Interface Role		IP address/Netmas k		Home Node/Home Port		Failover Group
SVM FCP Targe	t Po	rts							
SVM	VM FCP Port Name		WWPN		WWNN		Home Node		Home Port
Node FCP Initia	tor F	Ports							
Node Name	FC	FCP Port Name WWPI		N WWN		Homer Node			Home Port

Site Survey and Planning worksheet SDS CLI Scripts tab

As part of your Site Survey and Planning worksheet, you should have a tab containing information on your SDS CLI scripts.

The following is an example of how to set up your SDS CLI Scripts tab.

Controller 1	Controller 2
vol size vol0 aggr0 108g	
snap reserve bootcampvol 0	
snap reserve vol0 20	
snap autodelete bootcampvol on	
snap autodelete bootcampvol commitment try	
snap autodelete bootcampvol trigger volume	
snap autodelete bootcampvol target_free_space 20	
snap autodelete bootcampvol defer_delete user_created	
snap autodelete vol0 on	
snap autodelete vol0 commitment try	
snap autodelete vol0 trigger volume	
snap autodelete vol0 target_free_space 20	
snap autodelete vol0 defer_delete user_created	
vol autosize bootcampvol on	
vol autosize vol0 on	
vol options bootcampvol try_first volume_grow	
vol options bootcampvol fractional_reserve 100	
vol options vol0 try_first volume_grow	
vol options vol0 fractional_reserve 100	
qtree security /vol/bootcampvol unix	
qtree security /vol/vol0 ntfs	

Controller 1	Controller 2
snap sched bootcampvol 0 0 0	
snap sched vol0 0 2 6@8,12,16,20	
#LUN mapping skipped for /vol/qavol_narayan/testlun since LUN is not mapped to an iGroup.	
#LUN mapping skipped for /vol/bootcampvol/dm25_boot_lun since LUN is not mapped to an iGroup.	
#LUN mapping skipped for /vol/bootcampvol/dm25_data1_lun since LUN is not mapped to an iGroup.	
#LUN mapping skipped for /vol/bootcampvol/dm25_data2_lun since LUN is not mapped to an iGroup.	
#LUN mapping skipped for /vol/bootcampvol/dm26_boot_lun since LUN is not mapped to an iGroup.	
#LUN mapping skipped for /vol/bootcampvol/dm26_data1_lun since LUN is not mapped to an iGroup.	
#LUN mapping skipped for /vol/bootcampvol/dm26_data2_lun since LUN is not mapped to an iGroup.	
#LUN mapping skipped for /vol/bootcampvol/dm27_boot_lun since LUN is not mapped to an iGroup.	
#LUN mapping skipped for /vol/bootcampvol/dm27_data1_lun since LUN is not mapped to an iGroup.	
#LUN mapping skipped for /vol/bootcampvol/dm27_data2_lun since LUN is not mapped to an iGroup.	

Copyright information

Copyright © 2024 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

Trademark information

NETAPP, the NETAPP logo, and the marks listed at http://www.netapp.com/TM are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.