

Laptop protection

Fast / **No load** / **Minimal transfer**



DELL Technologies

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Agenda

- What do we expect from laptop backups?
- Speed
 - Backup
 - Restore
- No load
- No network

Agenda

- User friendly
- Automated
- Secure
- **Cost effective**

Laptops / PCs

DP4400 for backup/recovery laptops

- Laptop can be anywhere
 - GSM
 - WiFi
 - Local
- Almost no data transferred during the backup
 - even 0,01% (0,0001 of backup data) sent during the backup

WHY DELL EMC DP4400 ?

Simplicity in a Converged Solution



Backup & Restore



Replication



Disaster Recovery



Search & Analytics



Days

2U and 10x¹

Easy to deploy & upgrade



Hours



Deduplication



Cloud DR + LTR



Instant Access + Restore



VMware Integration

8TB–96TB

+ 192TB with

without additional HW

Densest 2U appliance—up to 20% more capacity²

Laptops / PCs

DP4400 for backup/recovery laptops

avamar72a Avamar Administrator - Activity (/)

Actions Tools VMware Navigation Help

Activity Monitor | Activity Summary | Activity Report | Replication Report

Status Type Source Group Plug-in Client Domain Container DD

All Statuses All Types All Sources All Groups All Plugins All Clients All Domains All Containers All Systems

Session							
Status	...	Start Time (C...	Elapsed	Server	Progress Bytes	New Bytes	Client
<input checked="" type="checkbox"/> Completed		2015-12-22 12:31	00h:03m:26s	DD - 10.64.123.58	71,4 GB	<0.05%	posaolkowdl4c.corp.emc.com

Laptops / PCs

DP4400 for backup/recovery laptops

The screenshot shows the Avamar Administrator interface. On the left, the 'Activity Monitor' tab is active, displaying a table of backup activities. The table has columns for Status, Type, Source, and Group. One activity is listed as 'Completed' with a status of 'Completed' and a date of '2015-12-22'. On the right, the 'Backup Statistics' dialog box is open, showing a table of backup properties and their values. The 'bytes_modified_sent' property is highlighted with a red box. The client name is 'posaolkowdl4c.corp.emc.com'.

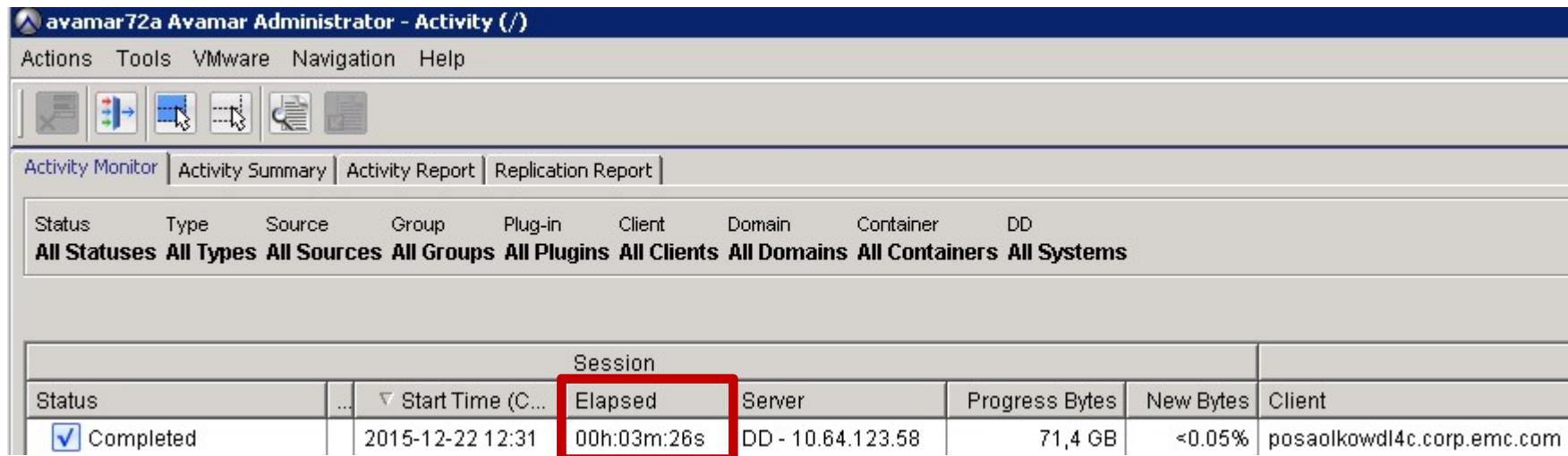
Property	Value
backup_label	GDD_Laptop-1450783877306
backup_number	11
bytes_excluded	0
bytes_modified	166011
bytes_modified_not_sent	0
bytes_modified_sent	166011
bytes_new	166011
bytes_overhead	48072
bytes_scanned	76642541527
bytes_skipped	0
cid	ad1d013fb94ccb78a8eda9d13d71b2c46d5ed851
client_name	posaolkowdl4c.corp.emc.com
client_os	Windows 7 Enterprise Edition Service Pack 1 64-bit
client_ver	7.2.101-31
completed_date	2015-12-22
completed_time	11:34:45.309
completed_ts	2015-12-22 11:34:45.309

Client: posaolkowdl4c.corp.emc.com

Laptops / PCs

DP4400 for backup/recovery laptops

- Immediate backup
 - 1 – 20 minutes to finish the laptop backup



The screenshot shows the Avamar Administrator interface. The title bar reads "avamar72a Avamar Administrator - Activity (/)". Below the title bar is a menu bar with "Actions", "Tools", "VMware", "Navigation", and "Help". A toolbar contains several icons. Below the toolbar are tabs for "Activity Monitor", "Activity Summary", "Activity Report", and "Replication Report". The main area displays a table with columns: Status, Type, Source, Group, Plug-in, Client, Domain, Container, and DD. The table is filtered to show "All Statuses", "All Types", "All Sources", "All Groups", "All Plugins", "All Clients", "All Domains", "All Containers", and "All Systems". A sub-table titled "Session" is visible, with columns: Status, Start Time (C...), Elapsed, Server, Progress Bytes, New Bytes, and Client. The "Elapsed" column in the sub-table is highlighted with a red box.

Status	Type	Source	Group	Plug-in	Client	Domain	Container	DD
<input checked="" type="checkbox"/> Completed								

Status	Start Time (C...)	Elapsed	Server	Progress Bytes	New Bytes	Client
<input checked="" type="checkbox"/>	2015-12-22 12:31	00h:03m:26s	DD - 10.64.123.58	71,4 GB	<0.05%	posaolkowdl4c.corp.emc.com

Laptops / PCs

DP4400 for backup/recovery laptops

- No load of protected laptop/PCS
 - No (minimal) reading data from laptop during backup

Laptops / PCs

DP4400 for backup/recovery laptops

- Immediate restore

avamar.labd.local Avamar Administrator - Activity (/)

Actions Tools VMware Navigation Help

Activity Monitor Activity Summary Activity Report Replication Report DR Activity Monitor

Status	Type	Source	Group	Plug-in	Client	Domain	Container	DD
All Statuses	All Types	All Sources	All Groups	All Plugins	All Clients	All Domains	All Containers	All Systems

Session									
Status	Error Code	Start Time (PST)	Elapsed	End Time (PST)	Type	Server	Progress Bytes	New Bytes	Client
<input checked="" type="checkbox"/> Completed		2017-11-15 07:25	00h:00m:17s	🕒 2017-11-15 07:25	Restore	DD - dda.labd.local	72.5 GB	<0.05%	solina.labd.local

Laptops / PCs

DP4400 for backup/recovery laptops

- Restore by:

Avamar admin

avamar.labd.local Avamar Administrator - Backup, Restore and Manage (/)

Actions Tools VMware Navigation Help

avamar.labd.local
MC_RETIRE
clients
MC_SYSTEM

Backup Restore Manage

By Date By File/Folder

November 15, 2017						
S	M	T	W	T	F	S
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2

Location	Number	Date & Time (PST)	Name	Plugin
Local	13	2017-11-15 07:24 AM	MOD-1510759378972	Windows File System
Local	12	2017-11-15 07:23 AM	MOD-1510759358686	Windows File System
Local	11	2017-11-15 07:18 AM	MOD-1510759096488	Windows File System
Local	10	2017-11-15 07:17 AM	MOD-1510757579338	Windows File System

Contents of Backup named MOD-1510759378972

Select	Name	Date	Size	Type	User	Group	P
<input checked="" type="checkbox"/>	data	2017-11-15 15:19:13	72.5 GB		Administrators	Domain Users	d

EMC Avamar Desktop/Laptop

Search

Browse

Backup

Back Up Now

Back Up...

Restore...

Settings >

Languages >

Manage >

About

Help

Exit

Search

User

Self-Service Recovery - Restore by Search

The screenshot displays the EMC Avamar Desktop/Laptop interface. A search bar at the top contains the text "change*" and a "Search" button. Below the search bar, a list of search results is shown with columns for Name, Size, Type, and Modified Date. The results include:

Name	Size	Type	Modified Date
Change this file every day.docx	14 KB	docx	3/25/10 2:32 PM
Catalina Changes that may impact c...	40 KB	doc	1/7/09 5:12 PM
Change Requests	4 KB	Folder	1/30/10 1:18 PM
Avamar Change Request Template.c...	69 KB	doc	2/17/09 10:26 AM

Below the search results, a dialog box for "Restore by Search" is open. It features a "Restore" button, radio buttons for "New Name" (selected) and "Overwrite Existing File", and a "Restore to" field with "Original location" selected and a "Browse..." button. The interface also shows a sidebar with "Restore by Search", "Restore by Browse", "Backup", and "Activity H..." options. At the bottom, a status bar indicates "Last Backup: 4/9/10 12:07 PM Successful" and "Next Backup: 4/10/10 12:00 PM".

Self-service

se

The screenshot displays the EMC Avamar Desktop/Laptop interface. On the left sidebar, there are four main options: 'Restore by Search', 'Restore by Browse', 'Backup Now', and 'Backup History'. The 'Restore by Browse' option is highlighted with an orange callout box. This callout points to a larger, detailed view of the 'Browse' dialog box. In this dialog, the 'Backup Date' is set to 10/5/2009 and the 'Time' is 12:04:14 PM. A dropdown menu for time selection is open, showing options for 12:04:14 PM, 9:02:11 AM, and 9:02:11 AM. Below the time selection, there is a 'Folders' section with a tree view showing 'C:' and 'Documents and Settings'. At the bottom of the dialog, there are radio buttons for 'New Name' and 'Overwrite Existing File', and a 'Restore to' field set to 'Original location'. The main interface also shows a status bar at the bottom with 'Last Backup: 10/09/2009 01:56:09 PM Successful' and 'Next Backup: 10/10/2009 12:00:00 PM'. The Windows taskbar at the bottom shows the Start button and several open applications including Outlook, Calendar, and PowerPoint.

Activity History

Safari File Edit View History Bookmarks Develop Window Help

EMC Avamar Desktop/Laptop

https://10.5.141.90:8444/dtlt/restore.action

EMC Avamar Desktop/Laptop

Activity History

Duration	Size	New Bytes	Workorder ID
00h:00m:57s	4 GB	< 1%	PM-Bill-1270836044687
00h:00m:06s	4 GB	0%	PM-Bill-1270749638082
00h:01m:04s	4 GB	< 1%	Bill-1270753866354
00h:01m:05s	4 GB	< 1%	PM-Bill-1270663245596
00h:02m:03s	4 GB	< 1%	PM-Bill-1270576861625
00h:01m:08s	4 GB	< 1%	PM-Bill-1270506774287
00h:01m:40s	4 GB	< 1%	PM-Bill-1270490442103
00h:02m:17s	4 GB	< 1%	PM-Bill-1270231206556
00h:00m:12s	4 GB	< 1%	Bill-1270179081173
00h:00m:14s	4 GB	< 1%	Bill-1270177214272

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	Size	Type	Modified Date
op/srs/AddRemoveClientFromGroupSRS.docx	37 KB	docx	4/8/10 10:01 PM
op/Avamar Champions Update 2010-0412 wjc v2.pptx	527 KB	pptx	4/9/10 12:01 PM
op/Avamar-Edge-EMCW-DRAFT-rev3 wjc.pptx	3 MB	pptx	4/8/10 4:10 PM
ments/Microsoft User Data/Office 2008 Identities/Main Identity	3 GB		4/9/10 10:01 AM
op/srs/DeleteClientSRS.docx	35 KB	docx	4/8/10 10:01 PM
esktop/srs/GetLocalProfileAtBackupSRS.docx	99 KB	docx	4/8/10 10:01 PM
Desktop/srs/MC_AvInstaller_EIS.doc	2 MB	doc	4/8/10 10:01 PM
MoveClientsToNewDomainSRS.docx	39 KB	docx	4/8/10 10:01 PM
ReplaceLegacyUISRS.docx	35 KB	docx	4/8/10 10:00 PM
ReportsSRS.docx	36 KB	docx	4/8/10 10:00 PM
RetireClientSRS.docx	37 KB	docx	4/8/10 10:00 PM

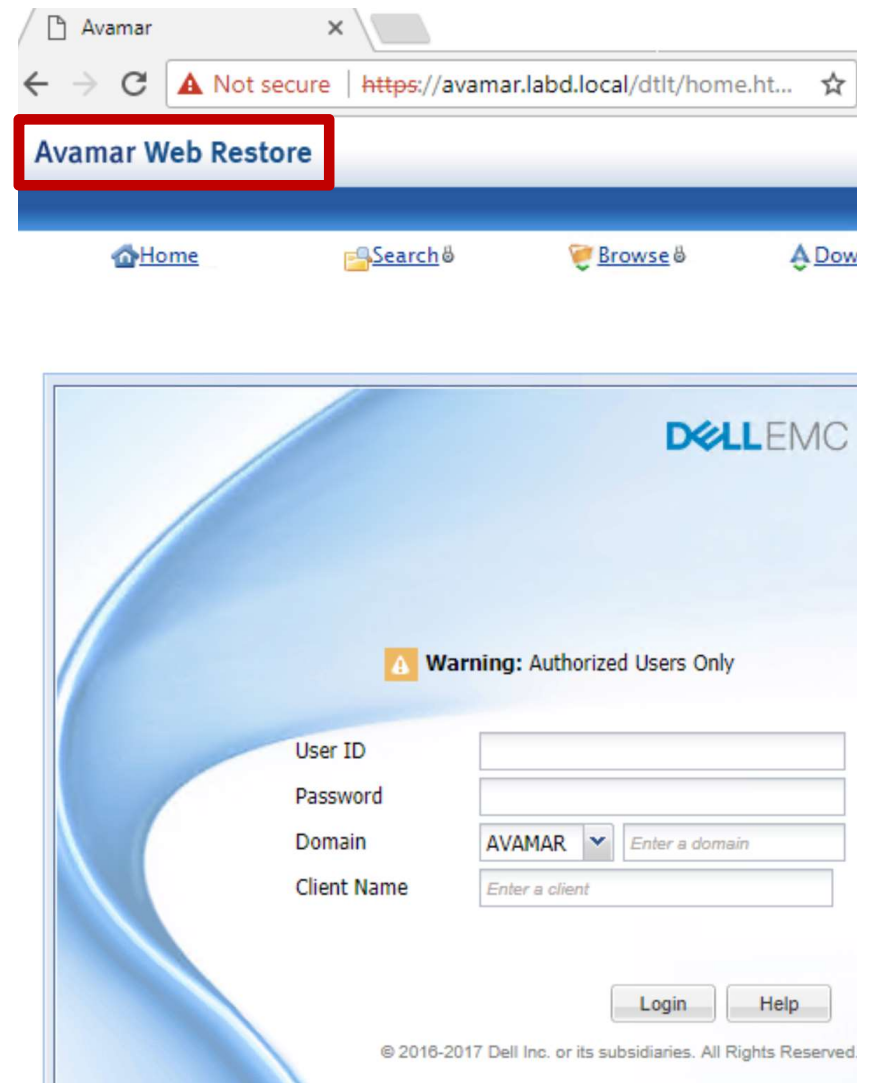
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Laptops / PCs

DP4400 for backup/recovery laptops

- Access to data from any device
 - Mobile
 - Laptop



Laptops / PCs

DP4400 for backup/recovery laptops

- All backups are full!
- Last backup kept for ever

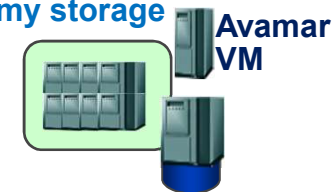
How can I implement laptop protection?



DP4400 (hardware/software)



**DPS Commercial package
+ my processor/memory
+ my storage**



**Data Domain
Virtual Edition
DDVE (6TB)**

Consolidated Design

Remote Site 1

Users: xx
File Data: 5 GB
YoY Growth: 5%



Encrypted data in flight – 256 Bit
AES Encryption



Remote Site 2

Users: x
File Data: 5 GB
YoY Growth: 5%

Encrypted data in flight – 256 Bit
AES Encryption

Cloud
Public Cloud
Or
ECS



DC

Users: XXX
File Data: 5 GB
YoY Growth: 5%



DELL Technologies

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