



**SYLLABUS FOR EVALUATOR GROUP  
EVALUATOR SERIES™ ADVANCED EDUCATION –  
OPTIMIZING STORAGE ENVIRONMENTS: TECHNOLOGIES AND SYSTEMS**

*CLASS IS HELD FOR 2 DAYS. THE NEXT CLASS IS HELD FEBRUARY 8-9, 2012, IN BOULDER, CO. OUR EUROPEAN CLASS WILL BE HELD FEBRUARY 14-15, 2012 IN THE NETHERLANDS.*

*CLASSES RUN FROM 8:30 TO 5:30 EACH DAY.*

*BREAKFAST AND LUNCH WILL BE PROVIDED EACH DAY, CONTINENTAL BREAKFAST WILL BE SERVED AT 8:00 AM.*

*CUSTOM CLASSES CAN BE ARRANGED BY CONTACTING THE EVALUATOR GROUP.*

**AGENDA DAY 1: STRATEGIES AND TECHNOLOGY**

<b>TIME</b>	<b>SUBJECT</b>	<b>MINUTES</b>
<b>8:30 – 8:45</b>	<b>INTRO OF CLASS MATERIALS AND INSTRUCTORS</b>	<b>15</b>
<b>8:45 – 10:45</b>	<b>INTRODUCTION TO DEVELOPING A STORAGE STRATEGY</b>  <b>UNDERSTANDING AND MANAGING THE FACTORS AFFECTING INFORMATION STORAGE/ RESOUES.</b> <ul style="list-style-type: none"><li>1. CAPACITY DEMAND<ul style="list-style-type: none"><li>A. PROVISIONING</li><li>B. DATA PROTECTION</li></ul></li><li>2. ECONOMICS<ul style="list-style-type: none"><li>A. CAPITAL EXPENDITURES</li><li>B. OPERATIONAL EXPENDITURES</li></ul></li><li>3. OPERATIONAL REQUIREMENTS<ul style="list-style-type: none"><li>A. SECURITY</li><li>B. GOVERNANCE / COMPLIANCE</li></ul></li><li>4. TECHNOLOGY DEVELOPMENTS<ul style="list-style-type: none"><li>A. TAKE ADVANTAGE OF NEW TECHNOLOGY</li><li>B. MANAGING TRANSITIONS</li></ul></li><li>5. EXTERNAL INFLUENCES<ul style="list-style-type: none"><li>A. TRENDS</li><li>B. PROMOTION BY VENDORS</li></ul></li></ul> <b>ESTABLISHING REQUIREMENTS AND ARCHITECTING SOLUTION</b>	<b>2 HOURS INCLUDING BREAK</b>
<b>10:45 - 12:45</b>	<b>CURRENT AND EMERGING TECHNOLOGIES FOR STORAGE</b> <ul style="list-style-type: none"><li>A. IMPACT OF VIRTUALIZATION ON STORAGE<ul style="list-style-type: none"><li>A. SERVER VIRTUALIZATION AND STORAGE REQUIREMENTS</li><li>B. VMWARE INTEGRATION<ul style="list-style-type: none"><li>I. VAAI</li><li>II. SITE RECOVERY MANAGER</li><li>III. VADP</li><li>IV. VASA AND STORAGE PROFILES</li><li>V. STORAGE DRS</li><li>VI. VAMP</li><li>VII. STORAGE VMOTION</li><li>VIII. VSPHERE STORAGE APPLIANCE</li></ul></li><li>C. VDI</li><li>D. STORAGE VIRTUALIZATION</li></ul></li></ul>	<b>2 HOURS</b>
<b>12:45 – 1:30</b>	<b>LUNCH</b>	<b>45</b>

TIME	SUBJECT	MINUTES
1:30 – 5:30	<p><b>TECHNOLOGIES FOR STORAGE</b></p> <ul style="list-style-type: none"> <li>B. BLOCK STORAGE VS. FILE STORAGE</li> <li>C. STORAGE NETWORKING TECHNOLOGIES</li> <li>D. SOLID STATE DEVICES</li> <li>E. TIERING OVERVIEW <ul style="list-style-type: none"> <li>A. INTERNAL TIERING</li> <li>B. EXTERNAL TIERING AND ARCHIVING</li> </ul> </li> <li>F. DATA REDUCTION TECHNOLOGIES <ul style="list-style-type: none"> <li>A. DEDUPLICATION</li> <li>B. COMPRESSIO N</li> </ul> </li> <li>G. DATA PROTECTION <ul style="list-style-type: none"> <li>A. RPO AND RTO</li> <li>B. REQUIREMENTS</li> <li>C. TECHNOLOGIES</li> <li>D. REPLICATION <ul style="list-style-type: none"> <li>A. POINT-IN-TIME COPY</li> <li>B. ASYNCHRNOUS REMOTE COPY</li> <li>C. SYNCHRONOUS REMOTE COPY</li> </ul> </li> </ul> </li> <li>H. SCALE UP VS. SCALE OUT STORAGE</li> <li>I. CLOUD AND IT AS A SERVICE</li> <li>J. BIG DATA ANALYTICS AND STORAGE</li> </ul>	3 HOURS INCLUDING BREAK
	<p><b>NEW TRENDS AND APPLICATIONS</b></p> <ul style="list-style-type: none"> <li>A. CLOUD AND IT AS A SERVICE</li> <li>B. BIG DATA ANALYTICS AND STORAGE</li> </ul>	1 HOUR

**DAY 2 AGENDA : DEEP DIVE INTO PRODUCTS**

<b>TIME</b>	<b>SUBJECT</b>	<b>MINUTES</b>
<b>8:30</b>	<b>DAY 2 AGENDA INTRO – QUESTIONS FROM PRIOR DAY</b>	<b>30</b>
<b>9:00 – 12:30</b>	<b>BLOCK-BASED STORAGE SYSTEMS</b> A. PRODUCT DESCRIPTIONS B. MODELS AND CHARACTERISTICS C. ADVANCED FEATURES D. STRENGTHS AND POTENTIAL CONCERNS	<b>3.5 HOURS INCLUDING BREAK</b>
<b>12:30 – 1:15</b>	<b>LUNCH</b>	<b>45 MIN</b>
<b>1:15 – 2:15</b>	<b>STORAGE VIRTUALIZATION PRODUCTS</b> A. PRODUCT DESCRIPTIONS B. ADVANCED FEATURES C. STRENGTHS AND POTENTIAL CONCERNS	<b>1 HOUR</b>
<b>2:15 – 3:45</b>	<b>FILE-BASED STORAGE SYSTEMS</b> A. GENERAL NAS OVERVIEW B. PRODUCT DESCRIPTIONS C. MODELS AND CHARACTERISTICS D. ADVANCED FEATURES E. STRENGTHS AND POTENTIAL CONCERNS	<b>1.5 HOURS</b>
<b>3:45- 4:15</b>	<b>BREAK</b>	<b>30 MIN</b>
<b>4:15 – 4:45</b>	<b>STORAGE MANAGEMENT</b> A. GOALS B. ENTERPRISE MANAGEMENT C. MANAGEMENT ELEMENTS D. SRM – PRODUCTS	<b>30 MIN</b>
<b>4:45 – 5:30</b>	<b>ARCHIVING</b> A. ARCHIVING TECHNOLOGY B. ARCHIVE ELEMENTS C. ARCHIVING SOFTWARE D. ARCHIVING SYSTEMS E. LTFS	<b>45 MIN</b>

**PRODUCTS TO BE COVERED:**

<b>HIGH END BLOCK</b>	<b>MID RANGE BLOCK</b>	<b>NAS</b>
<ul style="list-style-type: none"><li>• <i>EMC VMAX</i></li><li>• <i>EMC VMAXE</i></li><li>• <i>HP P10000 3PAR</i></li><li>• <i>HITACHI VSP (HP P9500)</i></li><li>• <i>IBM DS8000</i></li><li>• <i>IBM XIV</i></li></ul>	<ul style="list-style-type: none"><li>• <i>DELL COMPELLENT</i></li><li>• <i>DELL EQUALLOGIC</i></li><li>• <i>EMC VNX</i></li><li>• <i>HITACHI AMS</i></li><li>• <i>HP P4000</i></li><li>• <i>HP P6000 EVA</i></li><li>• <i>IBM V7000</i></li><li>• <i>IBM DS3500 / DCS3700</i></li><li>• <i>NETAPP FAS</i></li><li>• <i>XIO</i></li></ul>	<ul style="list-style-type: none"><li>• <i>HDS - BLUEARC</i></li><li>• <i>DELL FS7500</i></li><li>• <i>EMC ISILON</i></li><li>• <i>EMC VNX</i></li><li>• <i>HP X9000 IBRIX</i></li><li>• <i>IBM SONAS</i></li><li>• <i>NETAPP</i></li><li>• <i>MICROSOFT WSS-BASED</i></li></ul>

<b>SAN VIRTUALIZATION</b>		
<ul style="list-style-type: none"><li>• <i>DATACORE SANSYMPHONY</i></li><li>• <i>EMC VPLEX (NOT EXACTLY A VIRTUALIZATION APPLIANCE)</i></li><li>• <i>FALCONSTOR NSS</i></li><li>• <i>HDS VSP</i></li><li>• <i>IBM SVC / V7000</i></li><li>• <i>NETAPP V-SERIES</i></li></ul>		