DSA E-Series iSCSI Disk Arrays

www.boschsecurity.com

BOSCH
Invented for life

iSCSI RAID5 RAID6

- Scale-out network storage solution: controller unit with 12 internal HDDs with up to 192 HDDs via state-of-the-art SAS interface-connected expansion units
- Configurable hardware-based RAID protection (RAID-5 or RAID-6) for highest system performance
- Redundant hot-swappable power supplies and cooling fans
- Two 10 Gigabit Ethernet ports for highest speed iSCSI connectivity
- Fully modular design for ease of service

DSA E-Series represents the next generation of iSCSI digital video disk arrays by Bosch. They are state-of-the-art platforms designed for the security industries most demanding digital video storage applications to manage relentlessly growing digital video data. Since HD IP cameras and encoders have entered the surveillance market, the ever growing need for high bandwidth and low complexity of the storage infrastructure are the main challenges. The new DSA E-Series is the answer to it.

System overview

DSA E-Series is based on one 2U controller unit with 12 internal 3.5”, 7.2 K, SAS (Serial Attached SCSI), 2 TB or 3 TB HDDs (Nearline SAS). The controller unit is available as a standard Simplex Controller configuration and as a Dual Simplex Controller configuration for high-capacity and extreme performance requirements.
This storage system is a high-performance solution designed with robust flexibility that makes it a great fit for wide-ranging video surveillance requirements. Its balanced performance is designed for supporting high bandwidth and I/O intensive workloads. The DSA E-Series’ disk shelf option with a standard 2U expansion unit with 12 x 3.5”, 7.2 K, SAS, 2 TB or 3 TB HDD and a high-density 4U expansion unit with 60 x 3.5”, 7.2 K, SAS, 3 TB HDD enable custom configurations that can be optimized for any environment. And the DSA E-Series’ fully redundant I/O paths, advanced protection features, and extensive diagnostic capabilities deliver high levels of availability, integrity, and security.

Functions

DSA E-Series is the co-branded E2600 series from NetApp. It is a scale-out network storage solution that provides security, highest “in-the-box” scalability, peace-of-mind data protection, and simplified management of all your video data. NetApp pioneered the iSCSI protocol years ago and offers with the new E2600 product line a high-end product for the physical security market.
DSA E-Series in Simplex Controller configuration allows connecting up to seven disk shelf expansion units (12 x 2 TB or 3 TB HDD per expansion shelf) to one Single Controller base unit. In Dual Simplex

Controller configuration up to three high-density shelf expansion units (60 x 3 TB HDD per expansion shelf) to one Dual Controller base unit may be connected. It is a fully featured RAID protected disk array which provides RAID-5 protection for capacity-oriented environments and RAID-6 protection for availability-oriented environments. The RAID protection is based on a hardware RAID implementation for highest system performance. RAID-6 is highly recommended if the system will be used with a larger number of disk shelf expansion units.

High reliability and availability
DSA E-Series keeps your data safe and available with redundant hot-swappable power and fans, and protection from double-disk failure and single bit errors during RAID rebuilds with high performance RAID-6.
With over 20 years of storage development experience, DSA E-Series is based on a field-proven design architected to provide high reliability and availability. Its redundant components, automated path failover, and online administration keep organizations productive 24 x 7 x 365.
Further high-availability features include:

- Automatic drive failover and detection and rebuild using global hot spare drives
- Mirrored data cache with battery backup and destage to flash
- SANtricity Proactive Drive Health monitoring identifies problem drives before they create issues

Monitoring
Full SNMP support with MIB-II and NetApp custom MIBs supported. In case of component failures SNMP, e-mail alert notifications will be generated. Additionally, an Event Monitor for sending alert notifications to a central Major Event Log is available.

Management
NetApp SANtricity storage management software combines robustness and ease of use. Full-time storage administrators appreciate the extensive configuration flexibility which allows optimal performance tuning and complete control over data placement. Part-time system administrators love the intuitive interface and wizards designed to simplify their tasks. With its dynamic capabilities, SANtricity software supports on-the-fly expansion, reconfiguration, and maintenance without interrupting storage system I/O. SANtricity software is available as 32-bit and 64-bit Microsoft OS installation package.

Certifications and approvals

Region	Certification	
Europe	CE	DSA E-Series (2.0)
USA	UL	DSA E-Series

Installation/configuration notes

Installable on 32-bit and 64-bit Windows Clients, SANtricity storage management software provides easy central management of all DSA E-Series arrays available within one network. There is no additional software necessary to be installed on peripheral devices. In addition, the system provides a powerful Command Line Interface (CLI) which is fully remote accessible by SSH (Secure Shell).
DSA E-Series offers per controller a serial console connector and two dedicated Ethernet management ports for management access and 2 x 10 Gigabit Ethernet iSCSI host ports. Each port must be configured with a separate IP address; the two iSCSI host ports are separated access paths to the storage system and represent an individual iSCSI target each. The net capacity available is shown in the following table:

Configuration Information (RAID-5)	Net Capacity (GB)
Controller Unit (8 x 2 TB)	13034
Controller Unit (12 x 2 TB)	20482
Controller Unit (12 x 3 TB)	30723
Expansion Unit (12 x 2 TB)	20482
Expansion Unit (12 x 3 TB)	30723
Expansion Unit (60 x 3 TB)	153670

Configuration Information (RAID-6)	Net Capacity (GB)
Controller Unit (8 x 2 TB)	11172
Controller Unit (12 x 2 TB)	18620
Controller Unit (12 x 3 TB)	27930
Expansion Unit (12 x 2 TB)	18620
Expansion Unit (12 x 3 TB)	27930
Expansion Unit (60 x 3 TB)	139700

The limitations for the number of concurrent iSCSI sessions and bandwidth are outlined in the table below (specifications per controller only):

Network Uplink 1 GbE (RAID-5)			
	iSCSI Sessions	Bandwidth Mbps (Base Unit 12 x HDD)	Bandwidth Mbps (min. 1 x Base Unit + 1 x Expansion Unit: 24 x HDD)
Single port	400	500 / 32	500 / 60
Dual port	300 per port	500 / 32	800 / 160

Network Uplink 10 GbE (RAID-5)			
	iSCSI Sessions	Bandwidth Mbps (Base Unit 12 x HDD)	Bandwidth Mbps (min. 1 x Base Unit + 1 x Expansion Unit: 24 x HDD)
Single port	400	500 / 32	800 / 60
Dual port	300 per port	500 / 32	800 / 160

Network Uplink 1 GbE (RAID-6)			
	iSCSI Sessions	Bandwidth Mbps (Base Unit 12 x HDD)	Bandwidth Mbps (min. 1 x Base Unit + 1 x Expansion Unit: 24 x HDD)
Single port	400	400 / 25	600 / 50
Dual port	300 per port	400 / 25	600 / 50

Network Uplink 10 GbE (RAID-6)			
	iSCSI Sessions	Bandwidth Mbps (Base Unit 12 x HDD)	Bandwidth Mbps (min. 1 x Base Unit + 1 x Expansion Unit: 24 x HDD)
Single port	400	400 / 25	600 / 50
Dual port	300 per port	400 / 25	600 / 120

Notice

iSCSI session specifications refer to the total number of recording and replay sessions. Bandwidth data refer to <Recording> / <Replay>. The maximum overall bandwidth of a Dual Controller (Duplex) system is: 1920 Mbps read / write throughput in a 10 GbE uplink network.

Notice

DSA E-Series in Simplex Controller configuration are only supported by BVIP Firmware 5.52 and later and VRM 2.30 and later.
DSA E-Series in Dual Simplex Controller configuration are only supported by BVIP Firmware 5.60 and later and VRM 3.0 and later.
DSA E-Series controller units and 2U expansion units with 3 TB drives are only supported by BVIP Firmware 5.60 and later, VRM 3.0 and later, and Configuration Manager 4.45 and later.

Technical specifications

Base Unit DSA-N2E6X2-08AT

Electrical requirements–controller unit		
Parameter	Low range	High range
Nominal voltage	100 VAC	240 VAC
Frequency	50 to 60 Hz	50 to 60 Hz
Idle current	3.97 A	1.63 A
Maximum operating current	4.25 A	1.68 A
Sequential drive group spin up	4.27 A	1.76 A
Simultaneous drive spin up	6.13 A	2.71 A
System rating plate label	7.0 A	2.9 A

Power ratings	
KVA	0.400
AC Watts	399
BTU/h	1366

Note: for detailed information please see the NetApp E-Series Storage Systems Site Preparation Guide

System hardware specifications	
Chassis	CE2600 controller-drive tray conforms to the 483 mm (19.0 in) rack standard
Power supplies	Dual redundant, hot pluggable
Maximum disk drives	8 x 2 TB, 3.5”, Nearline SAS
Maximum net capacity	~13000 GB (RAID-5 configured)
DDR2 memory (system RAM)	2 GB
Integrated I/O	2 x 100 Mbps management port; 2 x 1/10 Gigabit Ethernet, copper
Remote management (via LAN)	Yes (plus serial console on dedicated port)

Mechanical	
Dimensions (H x W x D)	
• Controller-drive tray	86.4 x 482.6 x 552.5 mm (3.4 x 19 x 21.75 in)
• Shipping carton	241.3 x 584.2 x 685.8 mm (9.5 x 23 x 27 in)
Weight	
• Maximum weight	23 kg (55.72 lb)
• Maximum shipping weight	27.75 kg (61.2 lb)

Space requirements	
Front—cooling	760 mm (30 in) clearance in front of the controller
Rear—cooling	610 mm (24 in) clearance behind the controller
Front of chassis—maintenance	760 mm (30 in) clearance in front of the cabinet
Rear of chassis—maintenance	610 mm (24 in) clearance behind the cabinet

Environmental	
Temperature	
• Operating range (both cabinet and subsystem)	+10 °C to +35 °C (+50 °F to +104 °F)
• Maximum rate of change	10 °C (50 °F) per hour
• Storage range	-10 °C to +50 °C (+14 °F to +122 °F)
Relative humidity (non-condensing)	
• Operating range (both cabinet and subsystem)	20 to 80%
• Storage range	10 to 90%
Acoustic noise	
• Sound power (standby operation)	6.5 bels max
• Sound pressure (normal operation)	65 dBA max

Base Unit DSA-N2E6X2-12AT / DSA-N2C6X2-12AT / DSA-N2E6X3-12AT / DSA-N2C6X3-12AT

Electrical requirements—per controller unit

Parameter	Low range	High range
Nominal voltage	100 VAC	240 VAC
Frequency	50 to 60 Hz	50 to 60 Hz
Idle current	3.97 A	1.63 A
Maximum operating current	4.25 A	1.68 A
Sequential drive group spin up	4.27 A	1.76 A
Simultaneous drive spin up	6.13 A	2.71 A
System rating plate label	7.0 A	2.9 A

Power ratings—per controller unit	
KVA	0.400
AC Watts	399
BTU/h	1366

Note: for detailed information please see the NetApp E-Series Storage Systems Site Preparation Guide

System hardware specifications—per controller chassis	
Chassis	CE2600 controller-drive tray conforms to the 483 mm (19.0 in) rack standard
Power supplies	Dual redundant, hot pluggable (per controller unit)
Maximum disk drives	12 x 2 TB / 3 TB, 3.5", Nearline SAS
Maximum net capacity	~20500 GB / 30700 GB (RAID-5 configured)
DDR2 memory (system RAM)	2 GB
Integrated I/O	2 x 100 Mbps management port; 2 x 1/10 Gigabit Ethernet, copper (per controller unit)
Remote management (via LAN)	Yes (plus serial console on dedicated port)

Mechanical—per controller chassis	
Dimensions (H x W x D)	
• Controller-drive tray	86.4 x 482.6 x 552.5 mm (3.4 x 19 x 21.75 in)
• Shipping carton	241.3 x 584.2 x 685.8 mm (9.5 x 23 x 27 in)
Weight	
• Maximum weight	24.9 kg (54.9 lb) / 27 kg (59.52 lb)
• Maximum shipping weight	29.65 kg (65.37 lb) / 31.75 kg (70.0 lb)

Space requirements—per controller chassis	
Front—cooling	760 mm (30 in) clearance in front of the controller
Rear—cooling	610 mm (24 in) clearance behind the controller
Front of chassis—maintenance	760 mm (30 in) clearance in front of the cabinet
Rear of chassis—maintenance	610 mm (24 in) clearance behind the cabinet

Environmental—per controller chassis	
Temperature	
• Operating range (both cabinet and subsystem)	+10 °C to +35 °C (+50 °F to +104 °F)
• Maximum rate of change	10 °C (50 °F) per hour

• Storage range	-10 °C to +50 °C (+14 °F to +122 °F)
Relative humidity (non-condensing)	
• Operating range (both cabinet and subsystem)	20 to 80%
• Storage range	10 to 90%
Acoustic noise	
• Sound power (standby operation)	6.5 bels max
• Sound pressure (normal operation)	65 dBA max

Expansion Unit DSX-N1D6X2-12AT / DSX-N1D6X3-12AT

Electrical requirements—expansion unit

Parameter	Low range	High range
Nominal voltage	100 VAC	240 VAC
Frequency	50 to 60 Hz	50 to 60 Hz
Idle current	2.96 A	1.23 A
Maximum operating current	3.03 A	1.26 A
Sequential drive group spin up	4.23 A	1.76 A
Simultaneous drive spin up	4.43 A	1.83 A
System rating plate label	7.0 A	2.9 A

Power ratings

KVA	0.276
AC Watts	276
BTU/h	954

Note: for detailed information please see the NetApp E-Series Storage Systems Site Preparation Guide

System hardware specifications

Chassis	DE1600 controller-drive tray conforms to the 483 mm (19.0 in) rack standard
Power supplies	Dual redundant, hot pluggable
Maximum disk drives	12 x 2 TB / 3 TB, 3.5", Nearline SAS
Maximum net capacity	~20500 GB / 30700 GB (RAID-5 configured)
Integrated I/O	6 Gb SAS

Mechanical

Dimensions (H x W x D)	
• Drive tray	86.4 x 482.6 x 552.5 mm (3.4 x 19 x 21.75 in)
• Shipping carton	241.3 x 584.2 x 685.8 mm (9.5 x 23 x 27 in)
Weight	
• Maximum weight	27 kg (59.52 lb)
• Maximum shipping weight	31.75 kg (70.0 lb)

Space requirements

Front—cooling	760 mm (30 in) clearance in front of the cabinet
Rear—cooling	610 mm (24 in) clearance behind the cabinet
Front of chassis—maintenance	760 mm (30 in) clearance in front of the cabinet
Rear of chassis—maintenance	610 mm (24 in) clearance behind the cabinet

Environmental

Temperature	
• Operating range (both cabinet and subsystem)	+10 °C to +40 °C (+50 °F to +104 °F)
• Maximum rate of change	10 °C (50 °F) per hour
• Storage range	-10 °C to +50 °C (+14 °F to +122 °F)
Relative humidity (non-condensing)	
• Operating range (both cabinet and subsystem)	20 to 80%
• Storage range	10 to 90%
Acoustic noise	
• Sound power (standby operation)	6.5 bels max
• Sound pressure (normal operation)	6.8 bels max

Expansion Unit DSX-N6D6X3-60AT

Electrical requirements—expansion unit

Parameter	Low range	High range
Nominal voltage	220 VAC	240 VAC
Frequency	50 to 60 Hz	50 to 60 Hz
Idle current	6.0 A	6.0 A
Maximum operating current	7.56 A	7.56 A

Power ratings	
KVA	1.268
AC Watts	1222
BTU/h	4180
Note: for detailed information please see the NetApp E-Series Storage Systems Site Preparation Guide	

System hardware specifications	
Chassis	DE6600 controller-drive tray conforms to the 483 mm (19.0 in) rack standard
Power supplies	Dual redundant, hot pluggable
Maximum disk drives	60 x 3 TB, 3.5”, Nearline SAS
Maximum net capacity	~153670 GB (RAID-5 configured)
Integrated I/O	6 Gb SAS

Mechanical	
Dimensions (H x W x D)	
• Drive tray	177.8 x 482.6 x 825.5 mm (7.0 x 19 x 32.5 in)
• Shipping carton	482.6 x 609.6 x 1009.7 mm (19 x 24 x 39.75 in)
Weight	
• Maximum weight	105.2 kg (232 lb)
• Maximum shipping weight	193.2 kg (426 lb)

Space requirements	
Front—cooling	760 mm (30 in) clearance in front of the cabinet
Rear—cooling	610 mm (24 in) clearance behind the cabinet
Front of chassis—maintenance	760 mm (30 in) clearance in front of the cabinet
Rear of chassis—maintenance	610 mm (24 in) clearance behind the cabinet

Environmental	
Temperature	
• Operating range	0 °C to +35 °C (+32 °F to +95 °F)
• Maximum rate of change	10 °C (50 °F) per hour
• Storage range	-10 °C to +50 °C (+14 °F to +122 °F)
Relative humidity (non-condensing)	
• Operating range	20 to 80%
• Storage range	10 to 90%

Acoustic noise	
• Sound power (standby operation)	6.5 bels max
• Sound pressure (normal operation)	6.8 bels max

Notes:
General technical information for the RAID systems are provided in the NetApp E-Series Storage Systems Site Preparation Guide (Information Web: http://www.netapp.com; Part number: 54541-01, December 2012)

NetApp and SANtricity are registered trademarks of NetApp, all rights reserved. All data and dimensions are referenced from the NetApp Site Preparation Guide and from the NetApp Website and are subject to change without notice.

Ordering information

DSA E-Series base, 8 x 2 TB
High-performance, high-capacity storage system base unit, iSCSI disk array, 8 x 2 TB HDD
Order number **DSA-N2E6X2-08AT**

DSA E-Series base, 12 x 2 TB
High-performance, high-capacity storage system base unit, iSCSI disk array, 12 x 2 TB HDD
Order number **DSA-N2E6X2-12AT**

DSA E-Series base, 12 x 3 TB
High-performance, high-capacity storage system base unit, iSCSI disk array, 12 x 3 TB HDD
Order number **DSA-N2E6X3-12AT**

DSA E-Series base DC, 12 x 3 TB
High-performance, high-capacity storage system base unit, iSCSI disk array, 12 x 3 TB HDD, Dual Controller
Order number **DSA-N2C6X3-12AT**

DSA E-Series shelf, 12 x 2 TB
High-performance, high-capacity storage system expansion unit, iSCSI disk array, 12 x 2 TB HDD
Order number **DSX-N1D6X2-12AT**

DSA E-Series shelf, 12 x 3 TB
High-performance, high-capacity storage system expansion unit, iSCSI disk array, 12 x 3 TB HDD
Order number **DSX-N1D6X3-12AT**

DSA E-Series shelf, 60 x 3 TB
High-performance, high-capacity storage system expansion unit, iSCSI disk array, 60 x 3 TB HDD
Order number **DSX-N6D6X3-60AT**

Accessories

DSA E-Series storage expansion 2 TB
2 TB HDD
Order number **DSA-EDTK-200A**

DSA E-Series storage expansion 3 TB
3 TB HDD
Order number **DSA-EDTK-300A**

DSA E-Series rack
Empty rack, 40U
Order number **DSX-NRCK40-INT**

Services

Warranty extension, base 8 x 2 TB
12-month warranty extension for DSA E-Series base unit, 8 x 2 TB
Order number **DSA-N2E6S8-ESW**

Warranty extension, base 12 x 2 TB
12-month warranty extension for DSA E-Series base unit, 12 x 2 TB
Order number **DSA-N2E6S12-ESW**

Warranty extension, base 12 x 3 TB
12-month warranty extension for DSA E-Series base unit, 12 x 3 TB
Order number **DSA-N2E6XS-ESW**

Warranty extension, base DC 12 x 3 TB
12-month warranty extension for DSA E-Series base unit Dual Controller, 12 x 3 TB
Order number **DSA-N2C6XS-ESW**

Warranty extension, shelf 12 x 2 TB
12-month warranty extension for DSA E-Series expansion unit, 12 x 2 TB
Order number **DSX-N1D6S12-ESW**

Warranty extension, shelf 12 x 3 TB
12-month warranty extension for DSA E-Series expansion unit, 12 x 3 TB
Order number **DSX-N1D6XS-ESW**

Parts delivery, base 8 x 2 TB
12-month parts delivery within 4 hours for DSA E-Series base unit, 8 x 2 TB
Order number **DSA-N2E6S8-4PD**

Parts delivery, base 12 x 2 TB
12-month parts delivery within 4 hours for DSA E-Series base unit, 12 x 2 TB
Order number **DSA-N2E6S12-4PD**

Parts delivery, base 12 x 3 TB
12-month parts delivery within 4 hours for DSA E-Series base unit, 12 x 3 TB
Order number **DSA-N2E6XS-4PD**

Parts delivery, base DC 12 x 3 TB
12-month parts delivery within 4 hours for DSA E-Series base unit Dual Controller, 12 x 3 TB
Order number **DSA-N2C6XS-4PD**

Parts delivery, shelf 12 x 2 TB
12-month parts delivery within 4 hours for DSA E-Series expansion unit, 12 x 2 TB
Order number **DSX-N1D6S12-4PD**

Parts delivery, shelf 12 x 3 TB
12-month parts delivery within 4 hours for DSA E-Series expansion unit, 12 x 3 TB
Order number **DSX-N1D6XS-4PD**

Parts replacement, base 8 x 2 TB
12-month parts replacement within 4 hours for DSA E-Series base unit, 8 x 2 TB
Order number **DSA-N2E6S8-4PR**

Parts replacement, base 12 x 2 TB
12-month parts replacement within 4 hours for DSA E-Series base unit, 12 x 2 TB
Order number **DSA-N2E6S12-4PR**

Parts replacement, base 12 x 3 TB
12-month parts replacement within 4 hours for DSA E-Series base unit, 12 x 3 TB
Order number **DSA-N2E6XS-4PR**

Parts replacement, base DC 12 x 3 TB
12-month parts replacement within 4 hours for DSA E-Series base unit Dual Controller, 12 x 3 TB
Order number **DSA-N2C6XS-4PR**

Parts replacement, shelf 12 x 2 TB
12-month parts replacement within 4 hours for DSA E-Series expansion unit, 12 x 2 TB
Order number **DSX-N1D6S12-4PR**

Parts replacement, shelf 12 x 3 TB
12-month parts replacement within 4 hours for DSA E-Series expansion unit, 12 x 3 TB
Order number **DSX-N1D6XS-4PR**

Non-returnable disk, base 8 x 2 TB
12-month non-returnable disk option for DSA E-Series base unit, 8 x 2 TB
Order number **DSA-N2E6S8-NRD**

Non-returnable disk, base 12 x 2 TB
12-month non-returnable disk option for DSA E-Series base unit, 12 x 2 TB
Order number **DSA-N2E6S12-NRD**

Non-returnable disk, base 12 x 3 TB
12-month non-returnable disk option for DSA E-Series base unit, 12 x 3 TB
Order number **DSA-N2E6XS-NRD**

Non-returnable disk, base DC 12 x 3 TB
12-month non-returnable disk option for DSA E-Series base unit Dual Controller, 12 x 3 TB
Order number **DSA-N2C6XS-NRD**

Non-returnable disk, shelf 12 x 2 TB
12-month non-returnable disk option for DSA E-Series expansion unit, 12 x 2 TB
Order number **DSX-N1D6S12-NRD**

Non-returnable disk, shelf 12 x 3 TB
12-month non-returnable disk option for DSA E-Series expansion unit, 12 x 3 TB
Order number **DSX-N1D6XS-NRD**

Represented by:

Americas:
Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
security.sales@us.bosch.com
www.boschsecurity.us

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5617 BA Eindhoven, The Netherlands
Phone: + 31 40 2577 284
Fax: +31 40 2577 330
emea.securitysystems@bosch.com
www.boschsecurity.com

Asia-Pacific:
Robert Bosch (SEA) Pte Ltd, Security Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6571 2808
Fax: +65 6571 2699
apr.securitysystems@bosch.com
www.boschsecurity.asia

China:
Bosch (Shanghai) Security Systems Ltd.
201 Building, No. 333 Fuquan Road North IBP
Changning District, Shanghai
200335 China
Phone +86 21 22181111
Fax: +86 21 22182398
www.boschsecurity.com.cn

America Latina:
Robert Bosch Ltda Security Systems Division
Via Anhanguera, Km 98
CEP 13065-900
Campinas, Sao Paulo, Brazil
Phone: +55 19 2103 2860
Fax: +55 19 2103 2862
latam.boschsecurity@bosch.com
www.boschsecurity.com

© Bosch Security Systems 2014 | Data subject to change without notice
13473637259 | en, V4, 13. Feb 2014