



# Sustainability Workshop

Second Line of Defense  
Central Alarm Station  
System Administration

2-4 June 2014  
Jordan, Lebanon, & Oman  
Amman, Jordan

# Objectives



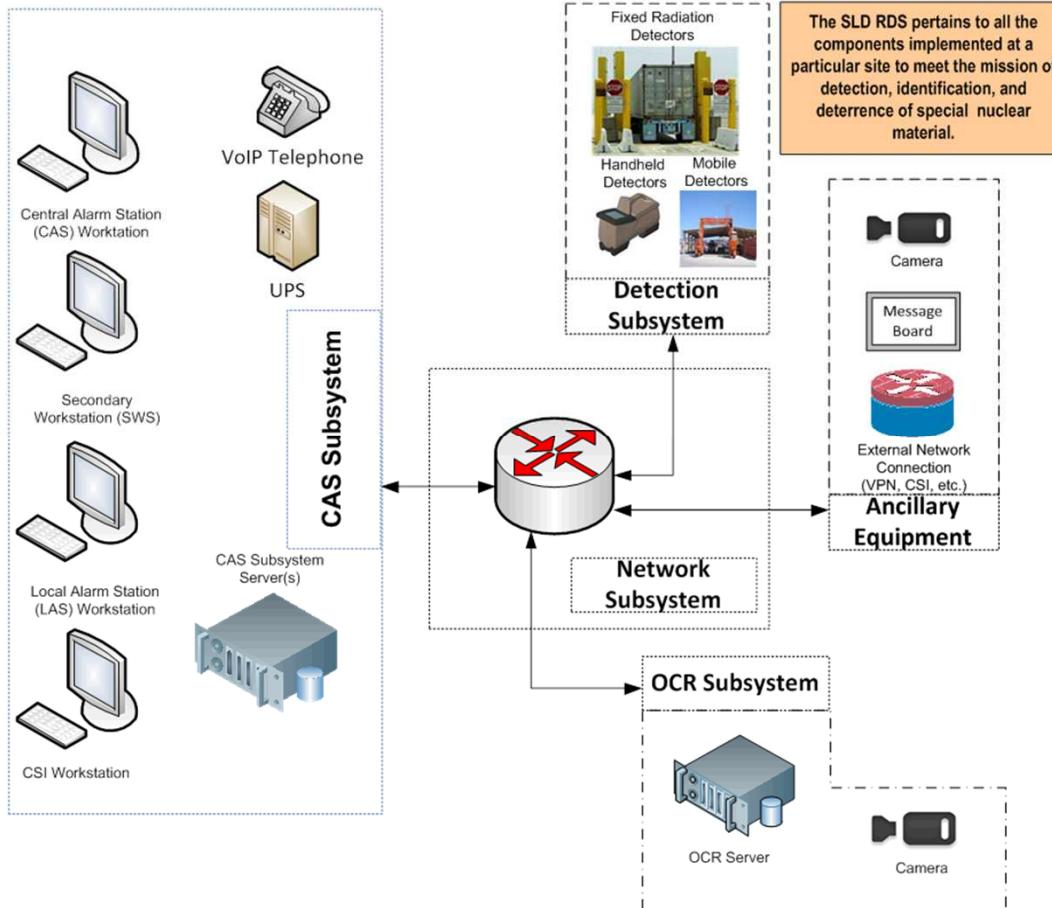
- ▶ Identify major activities performed by a system administrator (Sys Admin)
- ▶ Identify the skills required by a CAS system administrator
- ▶ Describe the importance of security plans and maintenance reporting



# CAS Overview



## Second Line of Defense (SLD) Radiation Detection System(RDS)



# Sys Admin Activities



- ▶ Troubleshooting failed hardware
- ▶ Performing software updates
- ▶ System backups
- ▶ User account management
- ▶ Reviewing log files
- ▶ Transmitting daily files

File	Edit	Format	View	Help
10/5/2010 3:56:54 PM	Category: General	Priority: 5	Severity: Information	"MirrorJob.Execute Complete.", Machine: MOSS01
10/5/2010 3:57:01 PM	Category: General	Priority: 5	Severity: Information	"MirrorJob.Execute Starting...", Machine: MOSS01
10/5/2010 3:57:01 PM	Category: General	Priority: 1	Severity: Verbose	"MirrorJob.GetShadowRoot Starting...", Machine: MOSS01
10/5/2010 3:57:01 PM	Category: General	Priority: 1	Severity: Verbose	"MirrorJob.GetSettings Starting...", Machine: MOSS01
10/5/2010 3:57:01 PM	Category: General	Priority: 1	Severity: Verbose	"MirrorJob.GetLastStartTime Starting...", Machine: MOSS01
10/5/2010 3:57:01 PM	Category: General	Priority: 1	Severity: Verbose	"MirrorJob.GetLastStartTime Complete.", Machine: MOSS01
10/5/2010 3:57:01 PM	Category: General	Priority: 1	Severity: Verbose	"MirrorJob.GetRecordStart Starting...", Machine: MOSS01
10/5/2010 3:57:01 PM	Category: General	Priority: 1	Severity: Verbose	"MirrorJob.GetSettings Complete.", Machine: MOSS01
10/5/2010 3:57:01 PM	Category: General	Priority: 5	Severity: Information	"Processor.ProcessChanges Starting..."
10/5/2010 3:57:01 PM	Category: General	Priority: 1	Severity: Verbose	"AuditLog.GetChanges Starting...", startdate = 2010-10-05 15:56:54, enddate = 2010-10-05 15:57:01, Machine: MOSS01
10/5/2010 3:57:01 PM	Category: General	Priority: 1	Severity: Verbose	"AuditLog.GetChanges Complete.", Machine: MOSS01
10/5/2010 3:57:01 PM	Category: General	Priority: 5	Severity: Information	"Processor.ProcessChanges Queried Audit Log.", Machine: MOSS01
10/5/2010 3:58:07 PM	Category: General	Priority: 5	Severity: Information	"Processor.ProcessChanges Complete.", Machine: MOSS01
10/5/2010 3:58:07 PM	Category: General	Priority: 5	Severity: Information	"MirrorJob.Execute Starting...", Machine: MOSS01
10/5/2010 3:58:07 PM	Category: General	Priority: 1	Severity: Verbose	"MirrorJob.GetShadowRoot Starting...", Machine: MOSS01
10/5/2010 3:58:07 PM	Category: General	Priority: 1	Severity: Verbose	"MirrorJob.GetSettings Starting...", Machine: MOSS01

# Troubleshooting Hardware



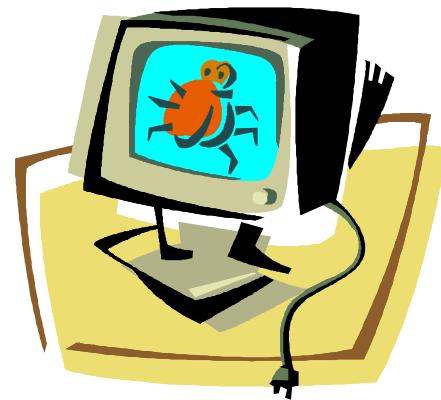
- ▶ Disk arrays
- ▶ Network equipment and cabling
- ▶ Workstation failure
- ▶ Power problems



# Software Updates



- ▶ Virus definitions
- ▶ Security patches
- ▶ Firmware upgrades
- ▶ CAS Software updates
- ▶ Operating Systems upgrades



# System Backups



- ▶ System images for disaster recovery
- ▶ Database backups
- ▶ How often to backup systems
- ▶ Backup storage locations

# User Account Management



- ▶ Creating new CAS accounts
- ▶ Deleting unused/unneeded CAS accounts
- ▶ Reviewing accounts with system owners



# Reviewing Log Files



- ▶ Windows event viewer
- ▶ Hardware vendor utilities
- ▶ CAS specific log files
- ▶ Daily Files for troubleshooting

Computer Management

Type	Date	Time	Source	Category	Event
Information	8/16/2007	9:47:13 AM	GlobalSCAPE	None	2
Information	8/16/2007	9:43:55 AM	GlobalSCAPE	None	2
Error	8/16/2007	9:37:37 AM	GlobalSCAPE	ARM	2
Error	8/16/2007	9:37:37 AM	GlobalSCAPE	ARM	2
Information	8/16/2007	9:37:00 AM	GlobalSCAPE	None	105
Information	8/16/2007	9:36:58 AM	GlobalSCAPE	None	108
Information	8/16/2007	9:36:55 AM	GlobalSCAPE	None	105
Information	8/16/2007	9:36:54 AM	GlobalSCAPE	None	108
Error	8/16/2007	9:36:51 AM	GlobalSCAPE	None	2
Information	8/16/2007	9:36:51 AM	GlobalSCAPE	None	105

# Daily Files



- ▶ Purpose of daily files
- ▶ Importance of daily files
- ▶ How to transmit daily files

```
GS,000033,000021,000022,000011,10-42-04.328
GS,000017,000024,000026,000020,10-42-04.546
GS,000017,000019,000018,000017,10-42-04.734
NS,000001,000001,000003,000002,10-42-04.937
GS,000019,000016,000022,000029,10-42-04.937
GS,000015,000020,000026,000021,10-42-05.125
SP,0.0961,07.095,011.42,000000,10-42-05.187
GS,000020,000014,000018,000013,10-42-05.343
GS,000021,000016,000018,000028,10-42-05.546
GS,000022,000019,000023,000023,10-42-05.734
NS,000000,000001,000002,000000,10-42-05.937
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GA,002787,000015,000024,000018,10-42-07.328
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GA,000024,000026,000018,000025,10-42-07.734
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NB,000000,000001,000000,000001,10-42-14.937
GB,000137,000126,000137,000132,10-42-15.031
```

# Security and Maintenance Plans



- ▶ Configuration management
- ▶ Spare Parts management
- ▶ User account management  
(computer security)



# Summary



- ▶ System administrator skills
- ▶ System administrator activities
- ▶ Working with system administrators
- ▶ Importance of maintaining equipment

