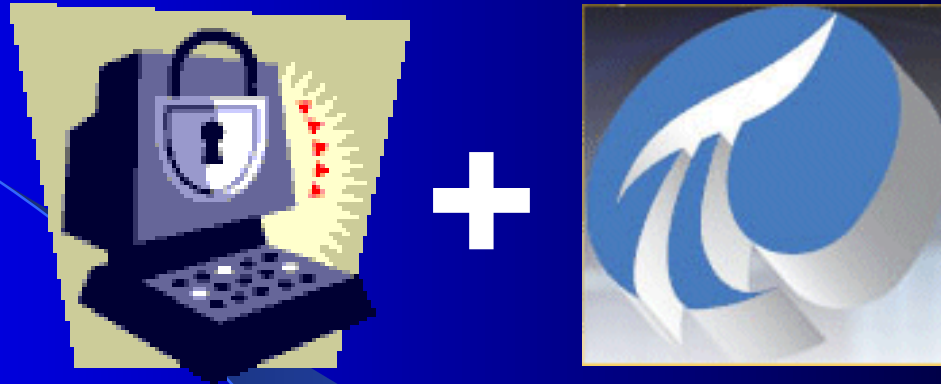


PI Security from the Administrators Standpoint



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CALIFORNIA ISO

Presentation to

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Managing Security

(PI-UDS Manual)

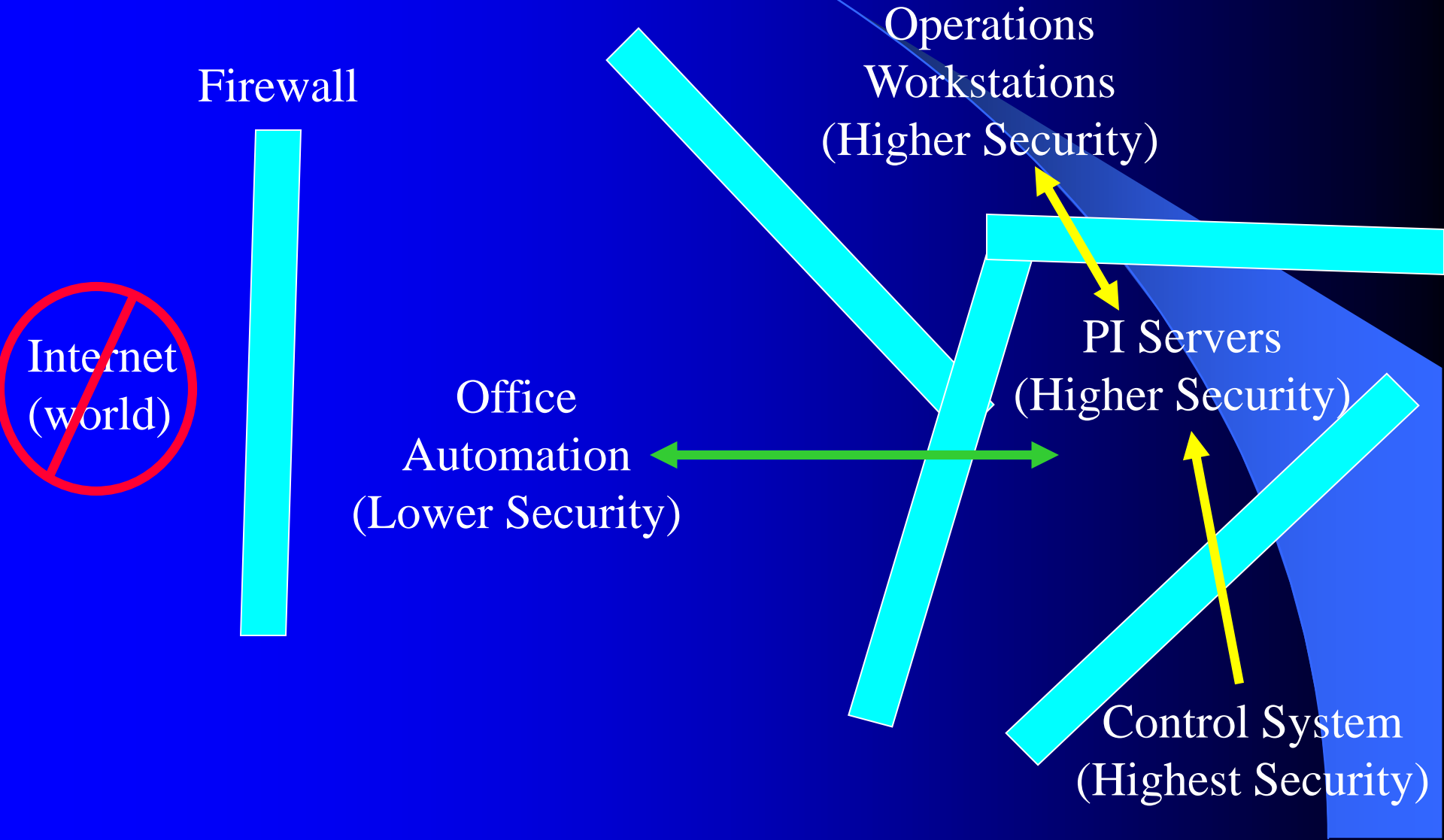
- Physical security for the PI Server computer
- Network security
- Operating system security
- PI Server security
 - Firewall
 - User Security
 - Groups Security
 - Database Security
 - Point Security
 - Trust-Login Security

Physical Security

- Install you server in a room with limited employee access...
- Maybe get a security guard...



Network Security



Operating System Security

- Keep you service packs up to date



- Run virus protection software



- Use best practices while employing any administrator level passwords (change them regularly)



PI Server Security

Firewall

- Firewall either “Allows” or “Disallows” access from IP Addresses
- Configuration of the firewall is accomplished via “piconfig”, see the PI-UDS Manual...

Host/Mask			Value	
192.168.168.*			ALLOW	
192.168.168.67			DISALLOW	

PI Server Security

User and Group Security

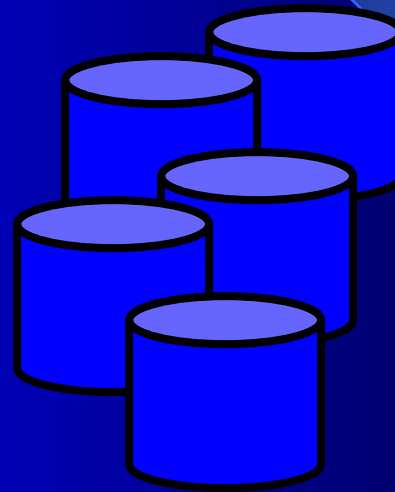
- Usernames and passwords are stored and assigned the ability to access different parts of the PI Server
 - pidemo (no password)
 - piadmin (*****)
 - operations (*****)
- Groups allow PI administrator to assign database permission via categorization of the users
 - piuser (access most tags “read only”)
 - piadmin (access all tags “read/write”)



PI Server Security

Database Security

- Database level security controls which users and groups can edit a specific tables:
 - PI Point Database
 - PI User Database
 - PI Digital State Database
 - PI Module Database
 - ...
- Accessed via “piconfig”



PI Server Security

Point Security

- Point-by-point access can be assigned via “owner”, “group” or “world”
- Access is granted for attribute reading/writing and data reading/writing

Tag	dataaccess	datagroup	dataowner	ptaccess	ptgroup	ptowner
sinusoid	o:rw g:rw w:rw	piadmin	piadmin	o:rw g:rw w:rw	piadmin	piadmin
RMTRSV.CNTLOD	o:rw g:rw w:r	RANGER	piadmin	o:rw g:r w:r	piadmin	piadmin
SYSZero	o:rw g:rw w:r	piuser	piadmin	o:rw g:r w:r	piadmin	piadmin

PI Server Security

Trust-Login Security

- Used to automatically assign PI user account when a known machines or Windows user makes a connection to the PI server
- Use the new PI-SMT system administrator tools to look and edit your trust table (really nice)



Managing Security

- Physical security for the PI Server computer
- Network security
- Operating system security
- PI Server security
 - Firewall, User, Groups, Database,
Point and Trust-Login Security

Discussion

