

SmartCOP



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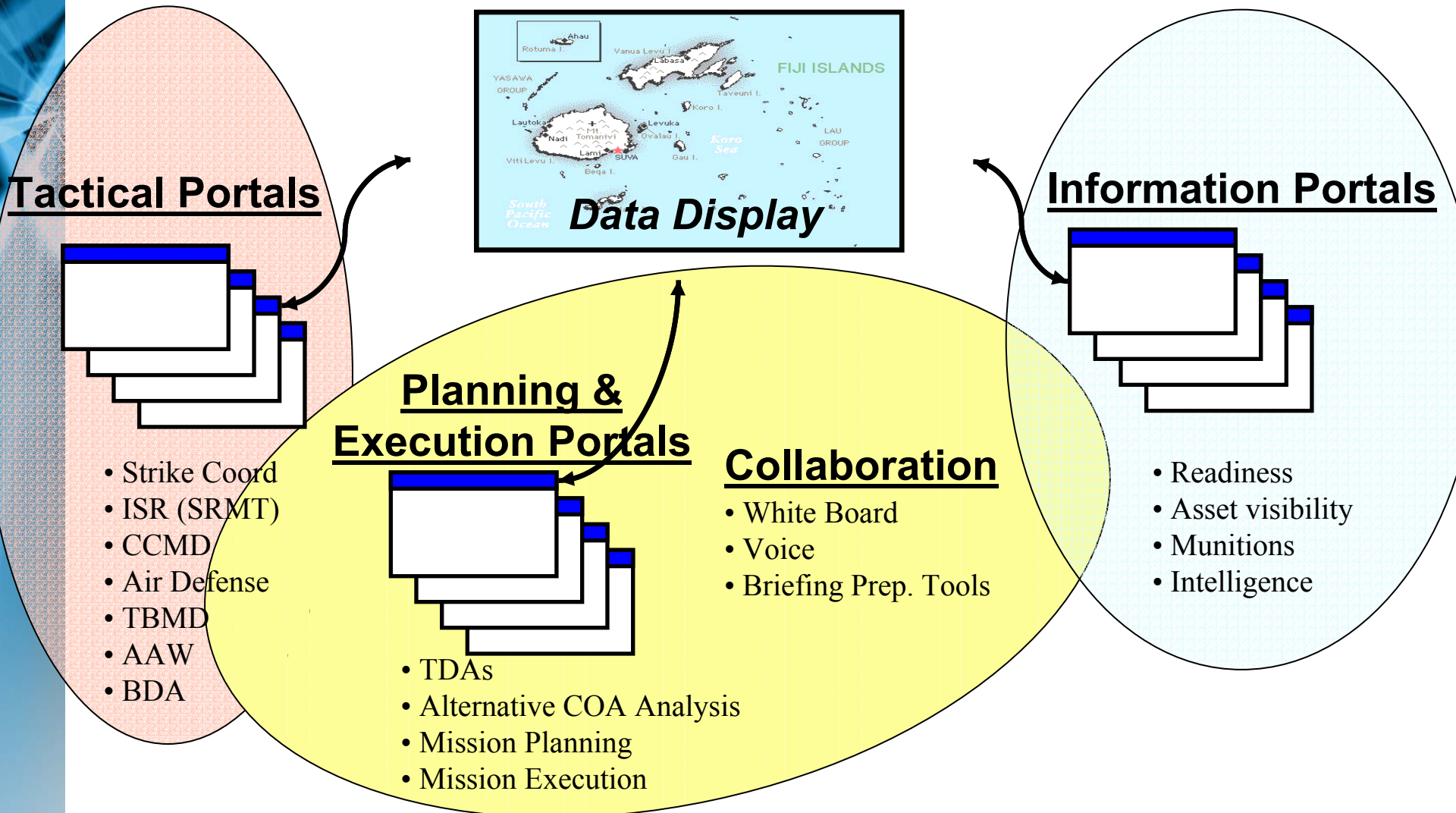
Northrop Grumman Corporation

Challenging Questions



- What is the hardest problem in NCW?
- What is the Command Center of the Future?
- What is the DoD strategy for Enterprise Information Management?
- If platform-centric is **bad** and network-centric is **good**, then platform-centric Situation Awareness (SA) is **bad**. So what is **good** SA?

What's a Wiki?



Wikis + KM + COP + smart agents = SMART COP

SmartCOP Concept

To each COP track, attach a collaborative web-based environment – called a “SmartPage**” – to foster information sharing and user interaction within a defined context.**

Then build value-added services (e.g., smart agents) to mine & exploit this enterprise repository of information-rich SmartPages across the COP.

- Designed for Dynamic and Ad hoc Change -
Engineered to Exploit Data within Context**

Access Track SmartPage

Highlight KITTY HAWK
and select SmartCOP

System - WGS 1984: Global Definition II

File Edit View Map Favorites Plot Controls Bookmarks Tools TDAs Tracks Corr/Bcst TBMD Intelligence

1 : 9,244,855

KITTY HAWK : 1

- Add Report
- Track Management
- Selected Summary
- Delete
- Range Circles
- Toggle Plot Options
- Center On
- URL
- Create TCO
- SmartCOP**
- Track Control
- Track To Route
- Pan To
- Delete from System
- Cut from System
- Copy
- Paste
- Paste Into
- Create New Group
- Send To
- Properties

384511N 1333647E Number of Objects: -2/23-

381613N 1310019E 1,352.45 NM 061530:41Z DEC 04

Start System - WGS 1984: G... 112404 Scenario Demo.ppt EN 3:30 PM

Display Kitty Hawk's SmartPage

Home - KITTY HAWK - Microsoft Internet Explorer provided by SPAWAR

File Edit View Favorites Tools Help

Address http://ngmsucssp1:88/SON430892296/default.aspx

Home Documents and Lists Create Site Settings Help

Up to Smart COP Demo

KITTY HAWK Home

Documents
Shared Documents
Hot Items
Exercises
Deployment Items
Other Items
Pictures
Lists
Tasks
Discussions
General Discussion
Surveys

Kitty Hawk

Kitty Hawk Strike Group

The Kitty Hawk Strike Group is composed of Cowpens, Chosin, Lassen, Port Royal and Sacramento.



Shield

Links

- N1
- N2
- N3
- N4
- N6
- Cowpens
- Chosin
- Lassen
- Port Royal
- Sacramento
- METOC
- POC's
- Web Admin
- Tools
- Links
- Warfare Commanders
- STWC
- IWC
- SCC
- ADC

Hot Items

Type	Name	Modified By
PDF	SCC Intentions MSG 211415Z0CT04 !NEW	dom_superproducer
PDF	OPTASK SOCA MSG 211515Z0CT04	dom_superproducer
PDF	CWC Intentions MSG 211215Z0CT04	dom_superproducer
PDF	AAWC-ADC Intentions MSG 211315Z0CT04	dom_superproducer

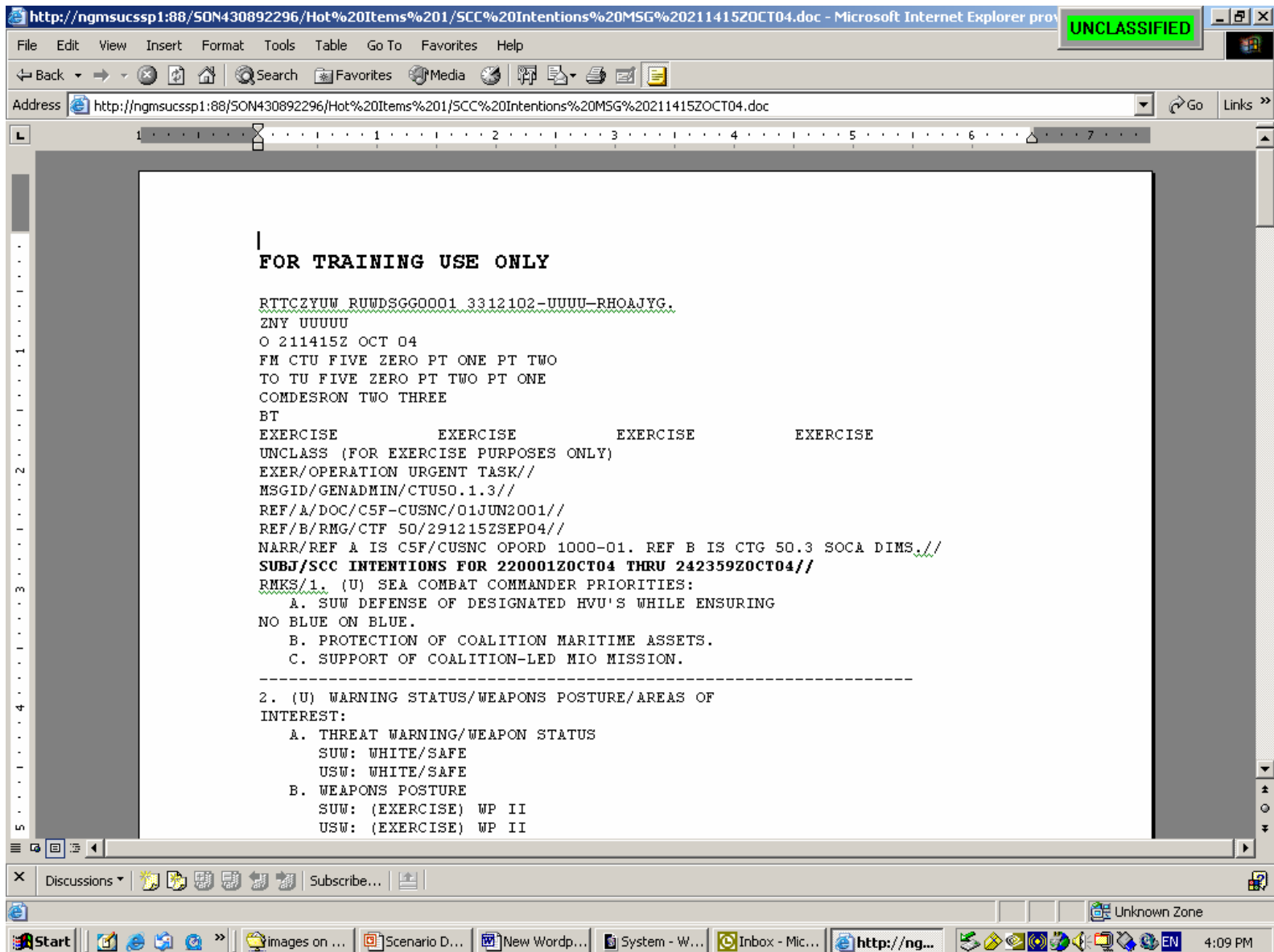
Add new document

Click to access a document

Done

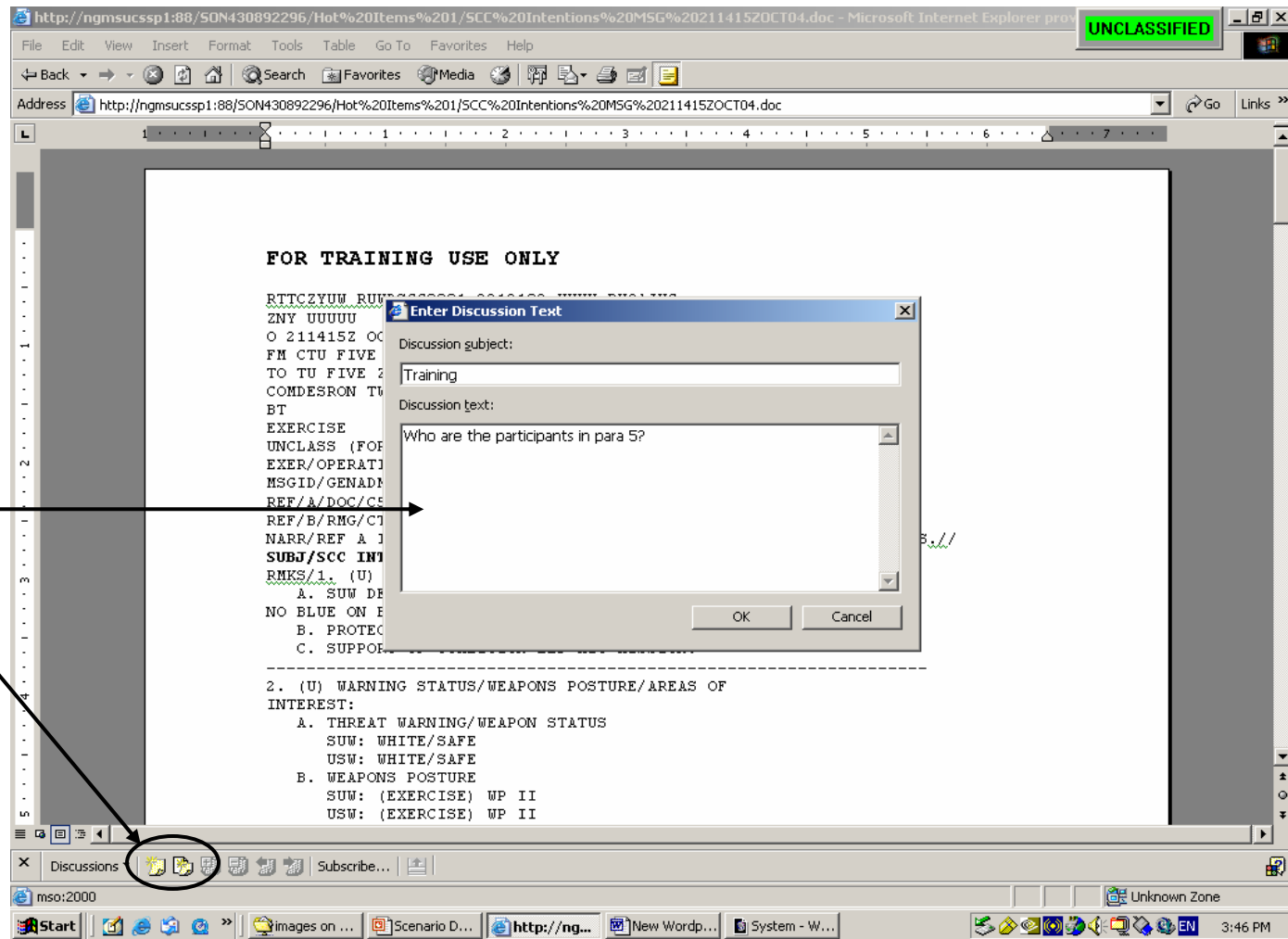
Local intranet

Access SSC Intentions Document



Post a question about the document

Start a discussion
about this document



This is a unique capability that integrates a *discussion session* with a *document*.
Chat, IM, and email do not support this level of information integration

Discussion Session

View of integrated document and discussion session

The screenshot shows a Microsoft Internet Explorer browser window. The address bar displays the URL: <http://ngmsucssp1:88/SON430892296/Hot%20Items%201/SCC%20Intentions%20MSG%20211415Z0CT04.doc>. The document content is as follows:

FOR TRAINING USE ONLY

RTTCZYUW RUWDSGG0001 3312102-UUUU-RHOAJYG.
ZNY UUUUU
O 211415Z OCT 04
FM CTU FIVE ZERO PT ONE PT TWO
TO TU FIVE ZERO PT TWO PT ONE
COMDESRON TWO THREE
BT
EXERCISE EXERCISE EXERCISE EXERCISE
UNCLASS (FOR EXERCISE PURPOSES ONLY)
EXER/OPERATION URGENT TASK//
MSGID/GENADMIN/CTU50.1.3//
REF/A/DOC/CSF-CUSNC/01JUN2001//
REF/B/RMG/CTF 50/291215ZSEP04//
NARR/REF A IS CSF/CUSNC OPORD 1000-01. REF B IS CTG 50.3 SOCA DIMS.//
SUBJ/SCC INTENTIONS FOR 220001Z0CT04 THRU 242359Z0CT04//
RMKS/1. (U) SEA COMBAT COMMANDER PRIORITIES:
A. SUW DEFENSE OF DESIGNATED HVU'S WHILE ENSURING
NO BLUE ON BLUE.

Below the document, a discussion session is visible. The subject is "Discussions about <http://ngmsucssp1:88/SON430892296/Hot Items 1/SCC Intentions MSG 211415Z0CT04.doc>". The subject line is "Training". The "From" field is "dom_superproducer". The message text is "Who are the participants in para 5?". The date and time are "12/6/2004 3:46 PM".

When the document is accessed, the discussion session is also available

Sample Email Alert

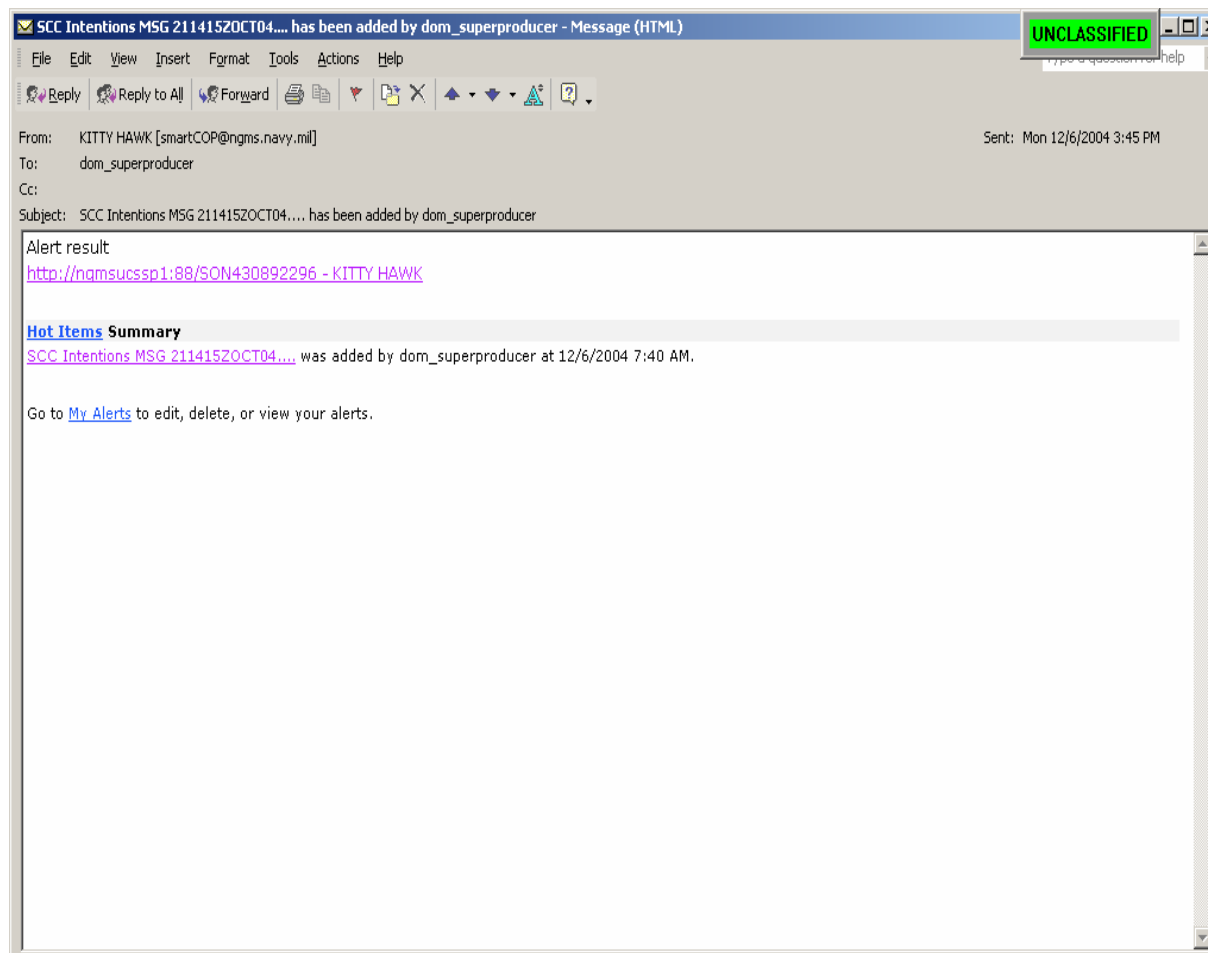
Alerts are provided
as email notification

Go to the KH Home Page

Go to the web part

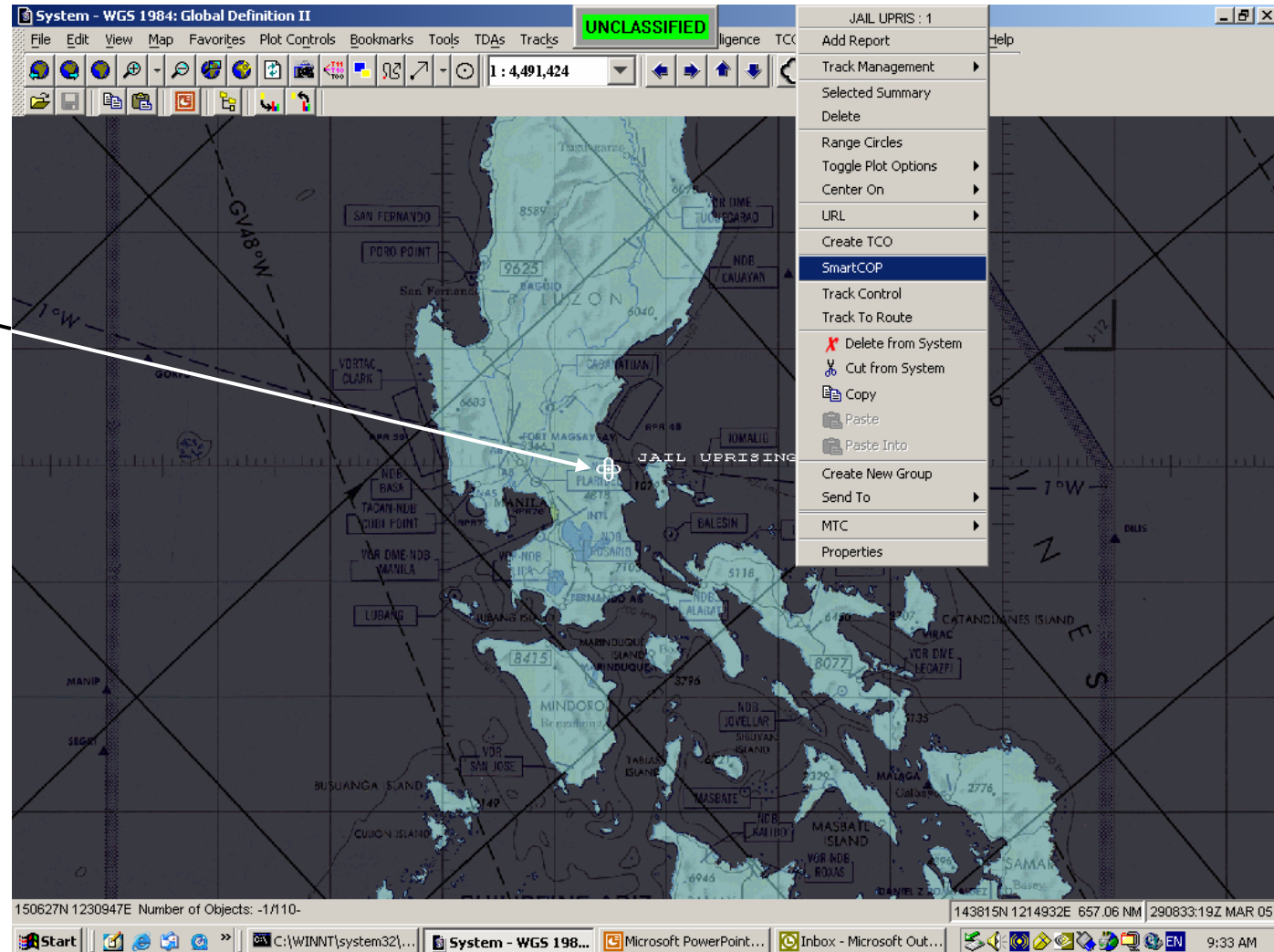
Go to the document

Go to the alert config



SmartPage for an Event

Jail Uprising in the Philippines



SmartPage for Jail Uprising

Home - JAIL UPRISING - Microsoft Internet Explorer provided by SPAWAR

UNCLASSIFIED

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media Print

Address http://ngmsucssp1:88/FSS480865351/default.aspx Go

Home Documents and Lists Create Site Settings Help Up to Smart COP Demo

JAIL UPRISING Home

Quick Launch

- Documents
 - News Articles
- Pictures
 - Jail Imagery
- Lists
 - Activity Calendar
- Discussions
 - Main Discussion
- Surveys

Image



Activity Calendar

- 3/31/2005 1:00 PM Meeting with Lawyers NEW Abu Sayuf meeting with lawyers
- 4/7/2005 1:00 PM Meeting with Lawyers NEW Abu Sayuf meeting with lawyers
- 4/14/2005 1:00 PM Meeting with Lawyers NEW Abu Sayuf meeting with lawyers
- 4/21/2005 1:00 PM Meeting with Lawyers NEW Abu Sayuf meeting with lawyers
- 4/28/2005 1:00 PM Meeting with Lawyers NEW Abu Sayuf meeting with lawyers

News Articles

Type	Name	Modified By
Document	Abu_sayaf members NEW	msaryan
Document	Police storm jail to reclaim it from Muslim extremist inmates NEW	lwhitt
Document	Terrorists push scuba training NEW	dom_superproducer

Add new document

Affiliate Data

Type	Name	Modified By
Document	Suspected Affiliates NEW	msaryan
Document	Suspected Money Man NEW	msaryan
Document	Suspected Arms Dealer NEW	msaryan

Add new document

Jail Imagery

Thumbnail	Name	Picture Size
There are no pictures to show in this view. To add a new picture, click "Add Picture".		

Discussions Subscribe... Local intranet

Click on
links to
Drill-Down

SmartPage drill-down for Jail Uprising

Internet Explorer provided by SPAW

Address: <http://ngmsucsp1.08/FSS40065351/Alfiliate%20Data/Suspected%20Arms%20Dealer.doc>



Alias: Hajj

DESCRIPTION

Date of Birth Used:	1962
Place of Birth:	Lebanon
Height:	5'7"
Weight:	145 to 150 pounds
Build:	Unknown
Language:	Arabic
Scars and Marks:	None known
Remarks:	Mugniyah is the alleged h organization, Lebanese H

Imad Fayed Mugniyah was indicted for his 1985 hijacking of a commercial airliner wh and crew members, and the murder of one U

Internet Explorer provided by SPAW

Address: <http://ngmsucsp1.08/FSS40065351/Alfiliate%20Data/Suspected%20Money%20Man.doc>

ABDELKARIM HUSSEIN MOHAMED AL-NASSER



Aliases: None known

DESCRIPTION

Date of Birth Used:	Unknown	Hair:	
Place of Birth:	Al Itsha, Saudi Arabia	Eyes:	
Height:	5'8"	Sex:	
Weight:	170 pounds	Complexion:	
Build:	Unknown	Citizenship:	
Languages:	Arabic, Farsi		
Scars and Marks:	None known		
Remarks:	None		

CAUTION

Internet Explorer provided by SPAW

Address: <http://ngmsucsp1.08/FSS40065351/Alfiliate%20Data/Suspected%20AI/Bates.doc>

ALI ATWA

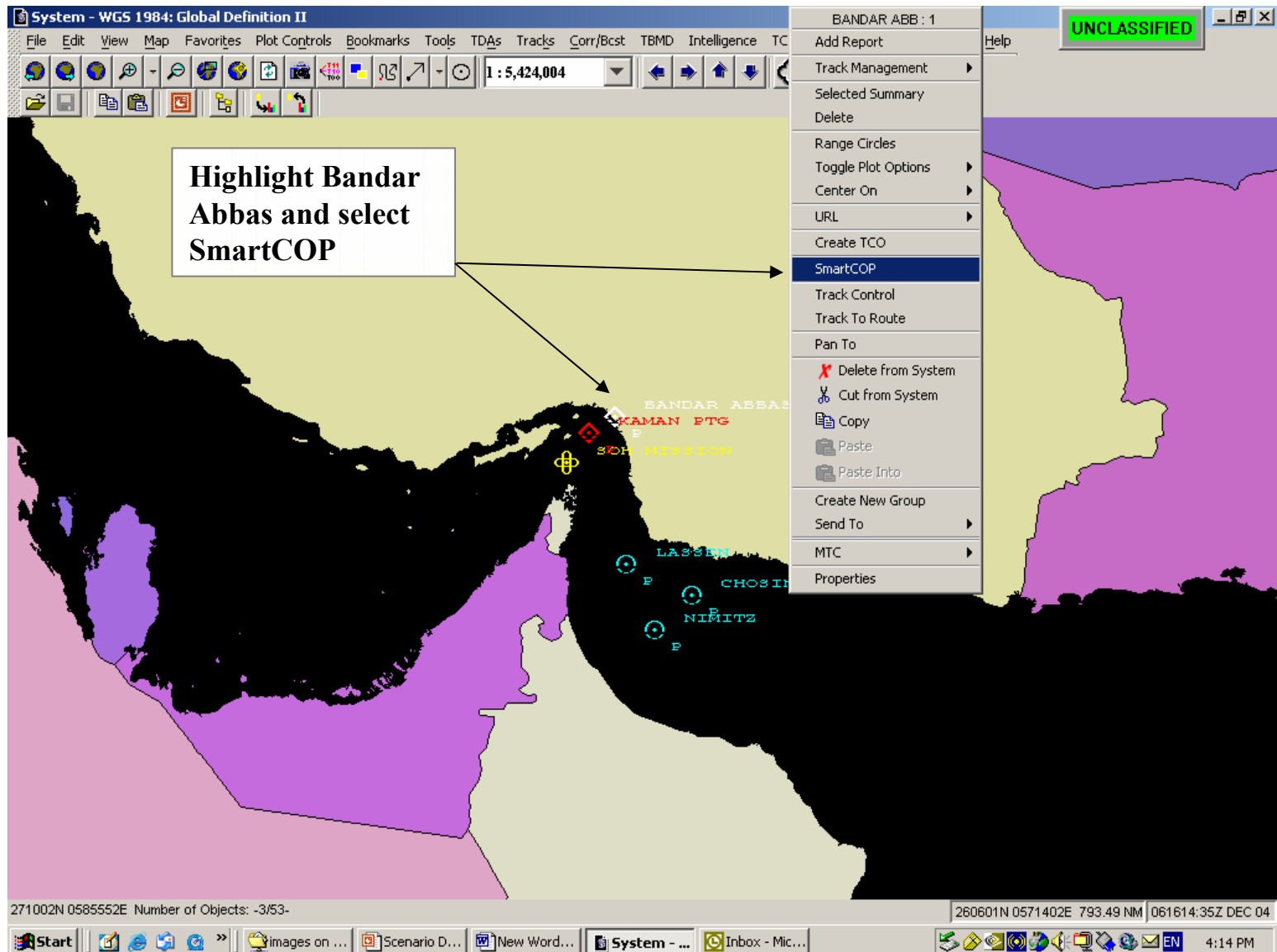


Aliases: Anmar Mansour Roushim, Hassan Rostom Salim

DESCRIPTION

Date of Birth Used:	Approximately 1960	Hair:	Unknown
Place of Birth:	Lebanon	Eyes:	Brown
Height:	5'8"	Sex:	Male
Weight:	150 pounds	Citizenship:	Lebanese
Build:	Medium		
Language:	Arabic		
Scars and Marks:	None known		
Remarks:	Atwa is an alleged member of the terrorist organization, Lebanese Hizballah. He is thought to be in Lebanon.		

SmartPage for Bandar Abbas



Bandar Abbas SmartPage

Home - BANDAR ABBAS - Microsoft Internet Explorer provided by SPAWAR

UNCLASSIFIED

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media Print

Address http://ngmsucssp1:88/F55469966313/default.aspx Go Links

Home Help Up to Smart CDP Demo

 **BANDAR ABBAS**

Home Modify This Workspace

Operational Order of Battle

Type	Name	Modified By
	PATROL FORCES	dom_superproducer
	BANDARABBAS_Order of Battle	dom_superproducer

 Add new document

Intelligence

Type	Name	Modified By
	TRISHUL SAM	dom_superproducer
	IranArmor	dom_superproducer
	shihab-3 missile picanddoc	dom_superproducer

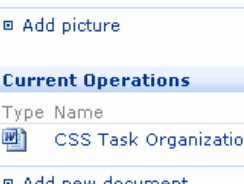
 Add new document

ISR

Title
3D Fly Through
Telecom Tower 1
Telecom Tower 3
Intelligence Summary
Telecom Tower 2

 Add new item

Imagery

Thumbnail	Name	Picture Size
	missileactivityImagery	
	shihab-3pic	298 x 223

 Add picture

Current Operations

Type	Name	Modified By
	CSS Task Organization	dom_superproducer

 Add new document

Current Operations Chat

BDA

Type	Name	Modified By
	burningoiltanker1	dom_superproducer
	burningoiltanks1	dom_superproducer
	burningoilplatform1	dom_superproducer

Facility Description

There are no items to show in this view of the "Facility Description" list. To create a new item, click "Add new item" below.

 Add new item

Communications

- Southern Persian Gulf
- Communication Links

 Add new item

Cryptologic Tasking Chat

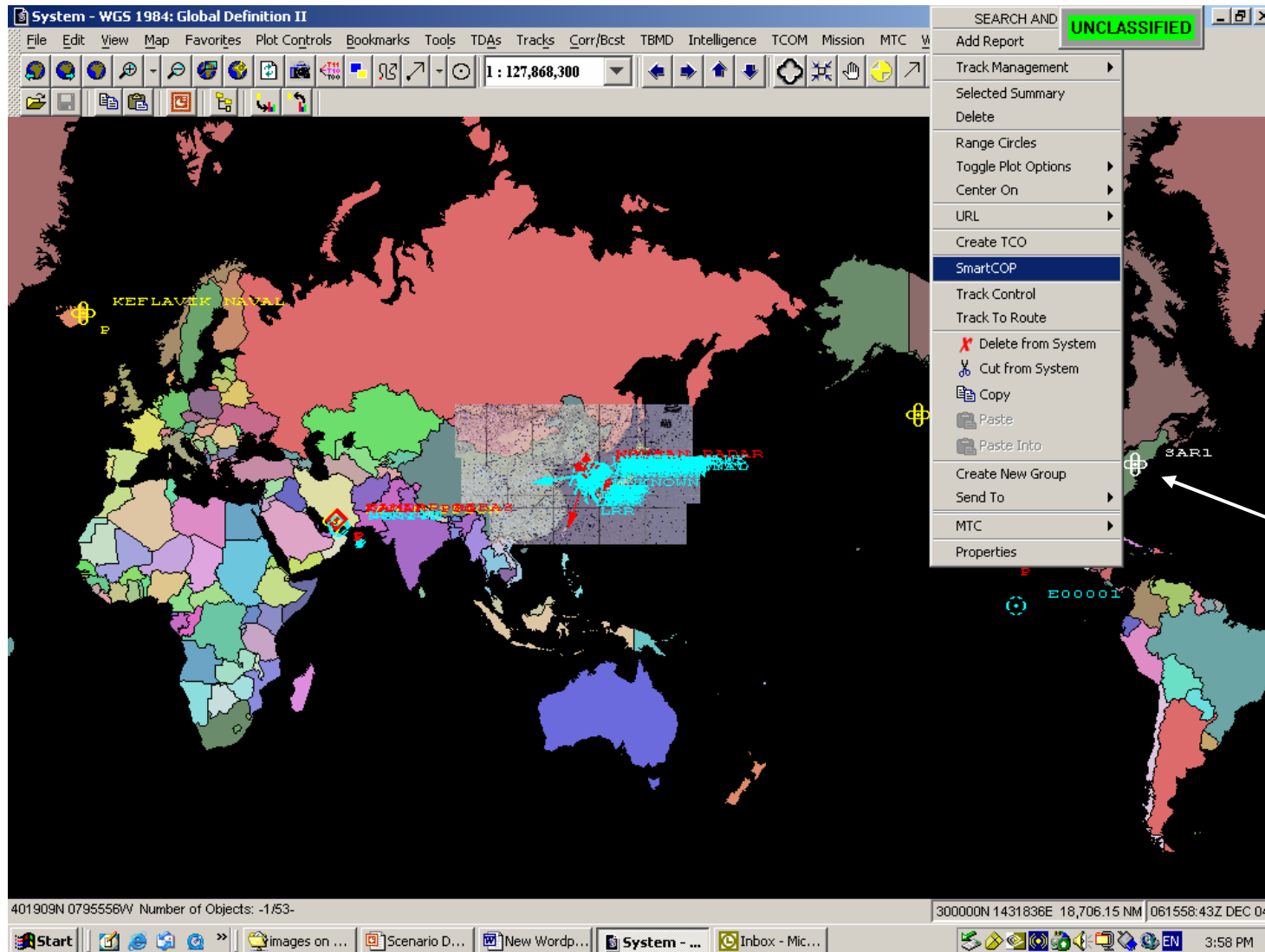
Subject	Posted By
ELINT	dom_superproducer
New Iranian MF pulse radar (see attached)	
Bandar Abbas TACAIR (no text)	dom_superproducer
Bandar Abbas Naval (no text)	dom_superproducer

 Add new discussion

Implement Mission “objects”

- **Create & display missions**
- **Support mission hierarchies**
- **Support mission temporal relationships**
- **Distribute across COP architecture**

Phase 3: Associate SmartPages to Missions



Here's a
SAR mission

SAR SmartPage

Home - SAR 1 - Microsoft Internet Explorer provided by SPAWAR

UNCLASSIFIED

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media Print Mail

Address http://ngmsucssp1:88/F55467203609/default.aspx Go Links

Home Help Up to Smart COP Demo

SAR 1

Home Modify This Workspace

Status: Distressed Unit

Thumbnail	Name	Picture Size
	shorthorn_zebu	699 x 454

▣ Add picture

Participants in Mission

- KITTY HAWK
- HS-8
- USCG DET A

▣ Add new link

METOC

Type	Name	Modified By
There are no items to show in this view of the "METOC" document library. To create a new item, click "Add new document" below.		

▣ Add new document

Situation Awareness

Type	Name	Modified By
There are no items to show in this view of the "Situation Awareness" document library. To create a new item, click "Add new document" below.		

▣ Add new document

Checklist

Type	Name	Modified By
	SAR Checksheets	dom_superproducer

▣ Add new document

Search And Rescue Plan

Title	Assigned To
Asset 1 of 3	
Asset 2 of 3	
Asset 3 of 3	

▣ Add new item

Plan Asset Pictures

Thumbnail	Name	Picture Size
	cv-63-kh-hi	832 x 477
	Asset 2 - HC-130	512 x 337
	Asset 1 - WMEC-210	512 x 349

Discussions

Subscribe...

Local intranet

Start | Images on ... | Scenario D... | New Wordp... | System - W... | Inbox - Mic... | Home - SA... | 3:59 PM

SmartCOP Benefits to the Warfighter

- ✓ **Well-defined integration point and organizing construct for information**
- ✓ **Completeness of tactical information**
- ✓ **TPPU-based collaboration**
- ✓ **Easy access (browser & permission)**
- ✓ **Composeable & open**
- ✓ **Dynamic information integration**
- ✓ **Dynamic workflow**
- ✓ **Expanded shared understanding**
- ✓ **Decision-making and risk mitigation**
- ✓ **Enhanced context (data point & trend curve)**
- ✓ **Information assurance**
- ✓ **Enhanced search**
- ✓ **Multi-level security**
- ✓ **Mission-centric**
- ✓ **Self-sustaining**
- ✓ **Plug-and-fight**
- ✓ **User-centric**

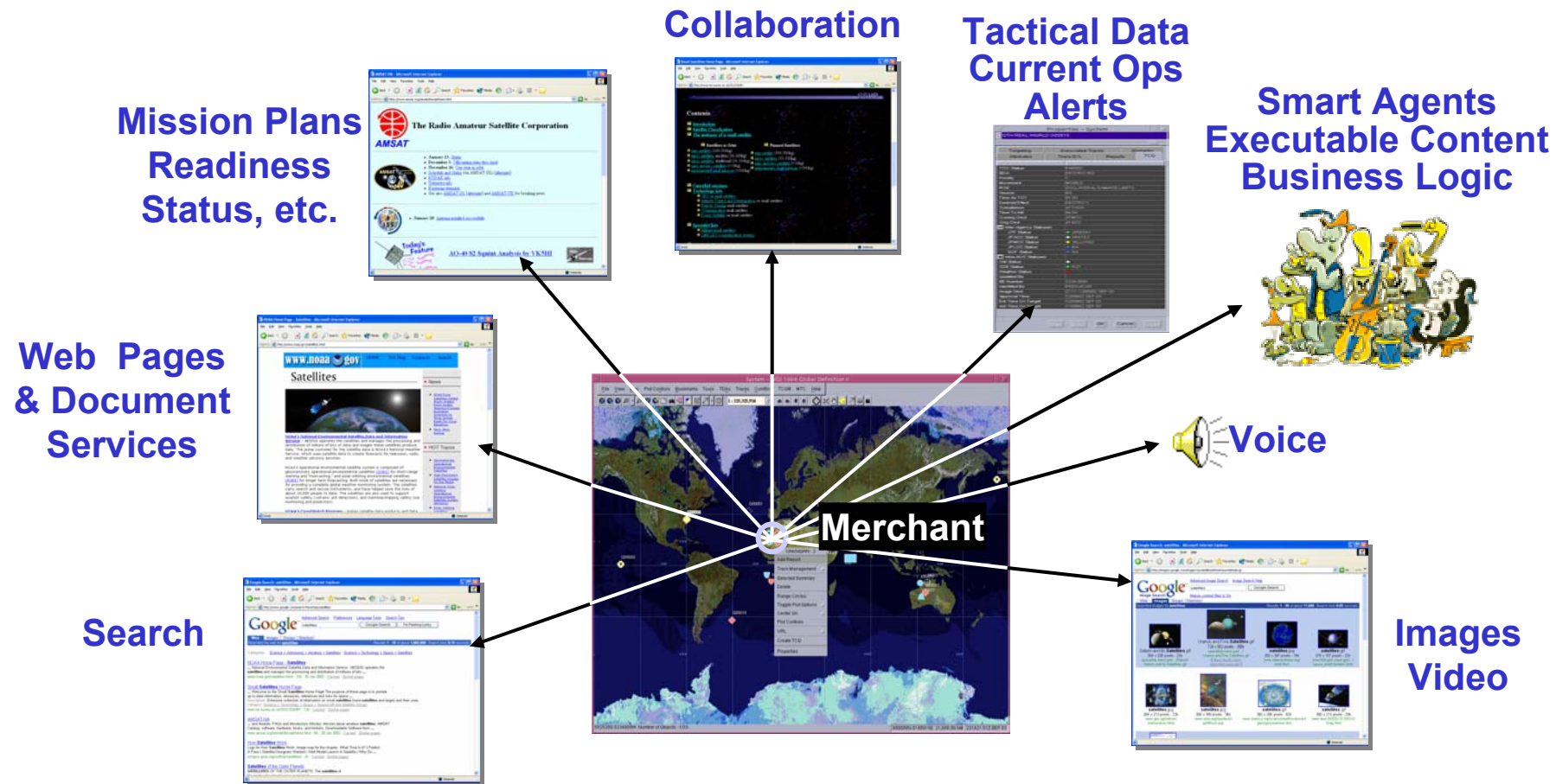


SIMPLE

Challenging Questions (revisited)

- What is the hardest problem in NCW?
 - Get the right information to the right person at the right time in the right format
 - Intermediate step: Provision relevant information to shared workspaces as soon as available in a customizable format
- What will the Command Center of the Future be?
 - Virtual workplaces in cyberspace (e.g., SmartPages)
- What is the Battlespace strategy for Enterprise Information Management?
 - Tag everything with metadata & use search
 - Intermediate step: Post information to SmartPages
- What is good SA?
 - Mission-centric SA (with associated SmartPages)

- Summary - SmartCOP for the Battlespace



- All Command & Control starts with Information -
Information is data organized according to context

Backups

Today's SmartCOP briefer



Dr. Lee Whitt