WES-2 Bridge Test Case Job Sheets

<u>Task 1:</u> Upload a small archived data case for event review (no simulation) and familiarize with simulation controls.

- 1. Right click on the desktop and select **Open in Terminal** to launch a shell window issue the following commands to list out the contents of an archived data case before the metadata is added:
 - a. cd /data1/wes_cases (note you can hit the tab key after starting to type out the paths and it will sometimes finish the command for you)
 - b. ls WES_Test_Exercise_Case_14_2_4_20150725
 - i. If a localization directory and/or a caseMetaData.xml file appear then this task has already been performed. If either of these is present, see Step 24 before continuing.
 - c. ls WES_Test_Exercise_Case_14_2_4_20150725/Processed
 - i. Note only some radar, satellite, warning, obs, grid, and ffmp data.
- 2. To start WES-2 Bridge, open a new shell window, cd /w2b/wes and type ./wes.sh and hit Enter.
- 3. Once the WES II Bridge GUI loads, check to see if EDEX_00 is Active under the "EDEX Instances" list. If it is listed as Not Active, right click on EDEX_00 and select Start EDEX.

()	WES II Bridge				-	. o x
File Edit Tools Window Help						
Available Cases				\$	1	- 0
Case Name	Path	Status	ED	EX Instances		
EDEX Instances				4	, .	
EDEX Instance		Status				
EDEX_00		Not Active				
EDEX_01		Not Active	Reset EDEX			
EDEX_02		Not Active	Start EDEX			
EDEX_03		Not Active	Stop EDEX			
EDEX_04		Not Active	Start CAVE			
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4. Under the File menu select AWIPS Archive Case,



and in the wizard first page:

a. Click on Browse button and navigate to /data1/wes_cases/ where you will select WES_Test_Exercise_Case_14_2_4_20150725.

•	Case From Archived Data Wizard		
WIPS Archive	ar: Source Directory	-	
Enter the locat	ion of the AWIPS archived data directory where Processed and Raw directories are located.	-1	
Source Directo	sry		
The case so	urce directory		
Source:	/data1/wes_cases/ Browse		
Case Type			
🗹 Use origi	nal archived data and do not copy to an alternate location.		

- **b.** Check the "Use original archived data and do not copy to an alternate location" checkbox to leave the WES_Test_Exercise_Case_14_2_4_20150725 in its current location.
- 5. Click the Next button.
- 6. In the wizard second page enter the following:
 - a. Case Name: Exercise Case
 - b. AWIPS II Version: 14.2.4 (this is used for tracking build dependencies)
 - c. Case Description: archiver filtered case with radar, satellite, obs, warnings and FFMP data (this is useful documentation for later use)

3	Case From Archived Data Wizard	×
AWIPS Archiver: Selec	t Destination	-
Select the destination v Additional directories c	where the case will be saved. an be specified by going to Window -> Preferences -> NEW.	*
Destination Directory		
Select a destination	case directory.	
Destination:	fata1/wes_cases/	0
Case Name		
Set a name for the ne	ew case.	
Case Name: E	xercise Case	
Awips II Version		
Enter Awips II Version	n for the case.	
Awips II Version:	14.2.4	
Case Description		
Set a brief descriptio	n for the case.	
Case Description:	archiver filtered case with radar, satellite, obs, warnings and FFMP data	A A

7. Click Next button.

- 8. Under WFOs box, click on Deselect All button, and then select OUN.
 - **a.** note if you had a lot of data you may choose to filter the data loaded in WES by using the **Data Types** box.
- 9. Click the Next button.
- 10. On the wizard third page enter the following:
 - **a.** Note you may want to use the Set Date button to select the time from the calendar to ensure you don't make a typo. Also note you can hold down the arrows on the spinboxes to rapidly index to a number.
 - b. Start Date: 2013-06-01 00:00 c. End Date: 2013-06-01 04:00

(9)	Cas	e From Archived Data Wizard	3
AWIPS Archiver:	Select Time Range		_ _
Select a range of	Start and End times for the	case.	-5
Start Date			
Start date for t	he case		
Start Date:	2013-06-01 00:00	Set Date	
End Date			
End date for th	e case		
End Date:	2013-06-01 04:00	Set Date	

- 11. Click the **Finish** button to create the case metadata.
 - a. When WES is done creating metadata for the case, you will see Exercise Case listed in the Case Name list of Available Cases, and it will have a status of Not loaded.
 - b. If you do not see your case listed, check under Window → Preferences and make sure /data1/wes_cases and /data2 have been added to your "Case directory paths"

3	WES II Bridge _					
File Edit Tools Window Help						
Available Cases				2 🖬 = 🗖		
Case Name		Path	Status	EDEX Instances		
Exercise Case	/dətə 1/	wes_cases/WES_Test_Exercise_Case_14_2_4_20150725	Not loaded			
EDEX Instances			Cable	\$°0		
EDEX Instance			Status			
EDEX_00			Active			
EDEX_01	Active					
EDEX_02			Active			
EDEX_03	Active					
EDEX_04			Active			
1		16:20:32Z 14-Sep-15	148M of 495M			

- 12. In the shell window with the WES_Test_Exercise_Case_14_2_4_20150725 issue the following commands to list out the contents of the case after the metadata is added:
 - a. ls WES_Test_Exercise_Case_14_2_4_20150725
 - i. note the caseMetaData.xml and the localizations folder
 - b. Is WES Test Exercise Case 14 2 4 20150725/localizations
 - i. Note the localization utility tree and maps have been copied into the case from the AWIPS-2 installed on WES-2 Bridge.

- 13. Select the Exercise Case, right click on the row, and select Load Case.
 - a. In the **Load Case** tab, review the metadata, and then click **Load** to load the records into the database.
 - **i.** This will take a minute or two, and the Progress Information bar will disappear when the data is loaded into an available EDEX instance.
 - **ii.** If there are no available EDEX instances, you will be prompted to unload an EDEX instance before being able to proceed.
 - iii. If no EDEX instances are running, WES II Bridge should prompt you to start one. You can also manually start one by right-clicking on an instance in the instance manager and choosing "Start EDEX".
- 14. Drag the vertical bar to the right, so you can see the Status of Exercise Case is Loaded and under EDEX Instances which EDEX instance the case is loaded on.

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					File Edit Tools Window Help
-		2 🖌			Available Cases
	EDEX Instances		Status	Path	Case Name
	EDEX_04		Loaded	/data1/wes_cases/WES_Test_Exercise_Case_14_2_4_20150725	Exercise Case
					9
	* -				
Vertical				Status	EDEX Instance
vertical				Active	EDEX_00
draggod				Active	EDEX_01
to reveal				Active	EDEX_02
more/less				Active	EDEX_03

- **a.** When a case is Loaded, it can be quickly accessed for event review or simulation.
- 15. Right click on Exercise Case, and select Review.
- **16.** In the Review Wizard, click **Finish**.
 - a. Click OK if the Low Available Memory for Application window appears.
 - **b.** CAVE will load with all the data visible, and after 1 minute will set the D2D clock to the end of the case for reference.
 - i. The D2D clock is not frozen and is moving forward past the end of the case, but has no impact.
- 17. Under the ktlx menu select All tilts base data, increase frame count to 64, and navigate through the data.a. Note this is static case review (no simulation), so the data doesn't update automatically.
- **18.** Swap panes with an empty pane, and under the Obs menu select Local CWA Warnings and navigate through the data.
- **19.** Swap panes with an empty pane, and under the Satellite menu select 4 panel (GOES M-Q) and navigate through the data.
- **20.** Under the **Upper Air** menu, select **Oklahoma City**, **OK** and notice no data will load because this data type was not included in the archive case.

21. Click on the D2D clock and enter 2013-6-1 for the date and 1-30-00 for the time and select Freeze time at this position.

	Set Time	×
○ Use current real time		
 Set time 		
Set time		
Year: 2013 🗘	Month: 6	Day: 1
Hours: 1	Minutes: 30 🗘	Second: 0
✓ Freeze time at this pos	ition	
	OK Cancel	

a. Your CAVE clock should have yellow text with a black background when the time is frozen:



22. To launch another CAVE on this case, identify the EDEX Instance in the Case Name list of available cases (i.e. EDEX_04), and then in the EDEX Instances on the bottom left of the WES II Bridge, right click on the appropriate EDEX Instance row and select Start CAVE

WES II Bridge					
File Edit Tools Window Hel	p				
Available Cases				2 🖬 👻 🗖	- 0
Case Name		Path	Status	EDEX Instances	
Exercise Case		/data1/wes_cases/WES_Test_Exercise_Case_14_2_4_20150725	Loaded	EDEX_04	
EDEX Instances				A U	
EDEX Instance		State	JS		
EDEX_00		Activ	/e		
EDEX_01		Activ	ve		
EDEX_02		Activ	/e		
EDEX_03		Activ	/e		
EDEX 04		Activ	/e		
Re	eset EDEX				
St	an EDEX				
St	art CAVE				
30		19:29:48Z 14-Sep-15	94M of 562M		

- a. Click OK on the available memory popup window if it pops up, and when CAVE launches, move the new CAVE to a new monitor.
- **b.** Note: You have to manually set the CAVE clock when using Start CAVE.
- 23. Load and view data on the new CAVE and verify it is the same data.
- 24. Shut down CAVE and the Text Workstation.

a. Any active EDEX started above can remain running even after shutting down CAVE.

25. As a final step, navigate to /data1/wes_cases/WES_Test_Exercise_Case_14_2_4_20150725 and remove the localizations directory and the caseMetaData.xml file. This will reset this task for future users.

Task 2: Run a Simulation on a Case Not Loaded, the WES_Test_Case_14_2_4_20150725

- 1. Select the WES_Test_Case_14_2_4_20150725 case in the Case Name tab, and right click and select Simulation.
- 2. In the Simulation tab (may need to move the vertical slider bar to see) enter the following:
 - a. Simulation Data Time Range
 - i. Start Date: 2013-05-31 22:25
 - ii. End Date: 2013-06-01 00:00
 - iii. Note: This task loads the whole case (no need to modify the Load Data Time Range). The Simulation Data Time Range will load a subset of the case for simulation.

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b. Under the WESSL Script, select El_Reno_beta.

lable Cases 🛛 🗖 🙆	WES Test Case Beta	14,2,4,20150725 #	
a 🗉 🖉 🙆	Simulation		
lame			
se Case	VES Test Case Beta est Case for WFS-2 Rr	14_2_4_20150725	
st Case Beta 14_2_4_2015072:	UN May 31-june 1, 20	13	
	E Case Information		Cimulate
	Name, location, and	description of the case	Simulate
	Case Location:	Hoto2MES Tect Coce Bato 14.2.4.20150725	Save Macro
		hand wester for the formers	Load Macro
	Case Name:	WES Test Case Beta 14_2_4_20150725	
			Reset
	Case Description:	Test Case for WES-2 Bridge OUN May 31-June 1, 2013	Add WFO
			Add Barts Burns
	Is Remote		Add Data types
	Host	localhost	
	- Load Data Time I	lance	
	The start and end dat	tes of the loaded data must be within the case start and end dates.	
	Case Start Date:	5412 AC 31 15 AA	
	core our our outer	2013-03-31 1200	
	Start Date:	2013-05-31 12:00 Set Date	
	Case End Date:	2013-06-01 06:00	
	End Date:	2013-06-01 06:00 Set Date	
r	Simulation Data	Time Range	
	The start and end dat	tes of the simulation must be within the start and end dates of the loaded data.	
	Start Date:	2013-05-31 22:25 Set Date	
	End Date:	2013-06-01 00:00 Set Date	
K Instances			
nstance	WESSL Script:	El_reno_beta 0	
EX_00	D Remove warmi	nes for the WEO	
EX_01	C Remove warm	ngs for the wro	
EX_0Z	Case Creation Inf	formation	
EX_03	have a second second		
	- WFO (1)	= Data Types (45)	

- 3. In the upper-right part of the simulation tab (may need to use scroll bars), click on the Simulate button.
 - a. The case will first be Loaded into an available EDEX which will take a minute or two.
 - **b.** If no EDEX instance is available you will need to unload a case by right clicking on a case name and selecting Unload.
- 4. Click **OK** on the available memory popup window if it pops up, and note when the WESSL2 window and Simulation Controls window pops up.
 - a. Ignore any error messages about "Requested map level(s)".
- 5. Click the PLAY button on the Simulation Controls window.
 - a. Note: You will be issuing a warning during this task. There is currently an issue where warnings will not display in D2D when running a simulation on a particular EDEX for the first time. To get around this, hit STOP under Simulation controls, close CAVE and the WESSL window, and repeat steps 1-4. You will be able to view your warning in D2D on this EDEX in any future simulations.

- 6. WESSL2 will pop up a new report every few minutes, and you can click on each one of the WESSL Events manually if you want to review them.
 - **a.** during the simulation you will receive text, image, and video popups relaying information from various sources on this day.
- 7. From the ktlx menu, select 0.5 Z+SRM8 and review the recent radar data.
- 8. Under the CAVE menu and New submenu select Text Workstation, and then issue a tornado warning with WarnGen (don't spend much time doing it, just for demonstration purposes), making sure to select a basis for the warning (radar detected, spotter, etc.) and/or hail threat.
 - a. If you receive a message about product expiration, click the "Go Ahead" button.
 - If warning product does not display in the Text Workstation after you select "Create Text" in Warngen, navigate to CAVE → Preferences → Text Workstation and make sure the host matches the workstation name you are running WES II Bridge from.
- 9. In a new pane, load the Local CWA Warnings plot from the Obs menu, and see your new warning.
- **10.** The simulation will stop at 00:00:00.
 - a. After the simulation has stopped, shut down CAVE and WESSL.

Task 3: Build a WESSL Script, and Play it in a Simulation

1. Check to see if EDEX_00 is Active under the "EDEX Instances" tab. If it is listed as Not Active, right-click and select Start EDEX

3	WES II Bridge			_ 0	×
File Edit Tools Window Help	File Edit Tools Window Help				
Available Cases			á	• 🖬 •	• 🗆
Case Name	Path	Status	EDEX Instances		
				• -	
EDEX Instances			4		-
EDEX Instance		Status			
EDEX_00		Not Active	_		
EDEX_01		Not Active Rese	t EDEX		
EDEX_02		Not Active Start	EDEX		
EDEX_03		Not Active Stop	CAVE		
EDEX_04		Not Active	UNT L		
	17:10:23Z 05-Nov-15	120M of 495M			

- 2. Right-click on WES_Test_Case_14_2_4_20150725 and select Launch Script Builder.
- 3. Click on the folder icon, click the New button, and choose a name for your script.

📂 🗙	₽ - →	
	Open Script	×
	Scripts available for this case	
	Open New Copy	Delete
	1	

4. Double click on the Date and Time empty cell where you will enter in 2013-5-31-22-25 and click OK.

File Date/Time Co	WE ommands Options	S II Script Build	er _ 🗆 X
📂 🗙 💠			
demo2			
Da	te and Time	Delay	Command
			Select A Time X
			Choose a Time for a WES Event
			Start Time: 2013-05-31 12:00:00 End Time : 2013-06-01 06:00:00
			Year 2013 😴
			Month 5 🗘
			Day 31 🔶
-			Hour 22 🗘
			Minute 25 😌
			Second:
			00 O 15
			○ 30 ○ 45
			Random Delay
$\left(\right)$	III		ОК
Current Case: WES_T	est_Case_Beta_14_2_4	4_20150725	

- a. Right-click in the Command box, and select Text.
- **b.** Click in the box and type "Begin Simulation", and click OK.



c. Click on the Play button to preview the event text popup.



- 5. Click on the + sign to add an event, and double click on the Date and Time empty cell where you will enter in 2013-5-31-22-25 with the 15 Second checkbox selected and click OK.
 - a. Right-click in the Command box, and select Image.
 - b. Click on the Browse button and navigate to /data1/wes_cases/ WES_Test_Case_14_2_4_20150725/wess12/resources.
 - c. Select 20130601 00 summary.png, and click the Open button.
 - **d.** Click on the **backward then forward Play** buttons in the **Event Previewer** window already open, and the image will display.
- 6. Click on the + sign to add an event, and **double click** on the **Date and Time empty cell** where
 - you will enter in 2013-5-31-22-28 with the 15 Second checkbox selected and click OK.
 - a. Right-click in the Command box, and select Video.
 - b. Click on the Browse button and navigate to /data1/wes_cases/ WES_Test_Case_14_2_4_20150725/wessl2/resources.
 - c. Select Sequence_01.mov, and click the Open button.
 - **d.** Click on the **backward then forward Play** buttons in the **Event Previewer** window already open, and the video will play.
- 7. Click on the + sign to add an event, and double click on the Date and Time empty cell where you will enter in 2013-5-31-22-35 with the 30 Second selected and click OK.
 - a. Right-click in the Command box, and select Map/Observation Event.
 - b. Type in 35.47 for Latitude and -98.35 for Longitude and "Golf ball hail in Hinton, OK", in the Report Text and click OK.
 - c. Click on the **backward then forward Play** buttons in the **Event Previewer** to preview the event text popup.

- 8. Click on the + sign to add an event, and double click on the Date and Time empty cell where you will enter in 2013-5-31-22-40 with the 45 Second selected and click OK.
 - **a. Right-click** on the box with a **green checkmark**, and select **Pause** (will pause the simulation with this event).
 - b. Right-click in the Command box, and select Presentation.
 - i. **Presentation** launches the Firefox browser on the file you specify. This is useful for incorporating content such as Flash modules, web page, or Articulate/Camtasia content.
 - c. Left-click on the Browse button, and navigate to /data1/wes_cases/ WES_Test_Case_14_2_4_20150725/wessl2/resources, select Warning LSR Loop.html, and click Open and OK.
 - d. Click on the backward then forward Play buttons in the Event Previewer to preview the debrief.
- 9. Click on the + sign to add an event, and double click on the Date and Time empty cell where you will enter in 2013-5-31-22-40 with the 45 Second selected (same time as in previous step) and click OK.
 - a. Right-click in the Command box, and select Text.
 - **b.** Enter in some text saying the simulation has been paused and to click on the PLAY button to resume and click OK.
 - c. Click on the **backward then forward Play** buttons in the **Event Previewer** to preview the event text popup.
- **10.** Click on the + sign to add an event, and **double click** on the **Date and Time empty cell** where you will enter in **2013-5-31-22-41** with the **00 Second** selected and click **OK**.
 - a. Right-click in the Command box, and select Presentation.
 - b. Left-click on the Browse button, and navigate to /data1/wes_cases/ WES Test Case 14 2 4 20150725/wessl2/resources, select engage.html, click Open and OK.
 - c. Click on the **backward then forward Play** buttons in the **Event Previewer** to preview the debrief module.
- 11. After completing steps 3–9, your Script Builder window should be populated with events similar to this:

Date/Time Commands Options Image: Command Options					w	ES II Script Builder		_ = ×					
Date and Time Delay Command Option 1 2013-05-31 22:25:00 Z A Begin Simulation 4 Default Default 2 2013-05-31 22:25:15 Z A Begin Simulation 4 Default Default 3 2013-05-31 22:28:15 Z A Begin Simulation 4 Default 4 2013-05-31 22:28:15 Z A Default Default 5 2013-05-31 22:28:15 Z A Default A Default	File Date/Time Commands Options												
demo2 Date and Time Delay Command Option 1 2013-05-31 22:25:00 Z A Begin Simulation 43 Default 2 2013-05-31 22:25:15 Z Image: Command comparison of the comparison													
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Date and TimeDelayCommandOption12013-05-31 22:25:00 ZABegin Simulation43Default22013-05-31 22:25:15 ZImage: Command Command Commany Properties A state of the stat	demo2												
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2 2013-05-31 22:25:15 Z Image: measure s/20130601_00_summary.png I	1	\checkmark	2013-05-31 22:25:00 Z		A	Begin Simulation	43	Default					
3 2013-05-31 22:28:15 Z Image: I	2	\checkmark	2013-05-31 22:25:15 Z		2	esources/20130601_00_summary.png	43	Default					
4 ✓ 2013-05-31 22:35:30 Z ☑ Observation 43 Default 5 ✓ 2013-05-31 22:40:45 Z ☑ les/LWX_Debrief/Warning_LSR_Loop.html 43 Default	3		2013-05-31 22:28:15 Z		B	l_Reno_resources/Sequence_01.mov	43	Default					
5 V 2013-05-31 22:40:45 Zles/LWX_Debrief/Warning_LSR_Loop.html 43 Default	4		2013-05-31 22:35:30 Z		-	Observation	43	Default					
	5	∇	2013-05-31 22:40:45 Z		Ţ	les/LWX_Debrief/Warning_LSR_Loop.html	43	Default					
6 2013-05-31 22:40:45 Z A Simulation paused. Click Play button to resu 🕸 Default	6		2013-05-31 22:40:45 Z		A	Simulation paused. Click Play button to resu	43	Default					
7 🔽 2013-05-31 22:41:00 Z 🔤teraction - Engage output/engage.html 📢 Default	7	V	2013-05-31 22:41:00 Z		-	teraction - Engage output/engage.html	43	Default					
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Current Case: WES Test Case Reta 14.2.4.20150725													

- 12. Close the WES II Script Builder and Event Previewer windows and click Yes.
- 13. Select the WES_Test_Case_14_2_4_20150725 case in the Case Name tab, and right click and select Quick Simulation since you now have the case Loaded.

14. In the Simulation tab Simulation Data Time Range enter 2013-05-31 22:25 for the Start Date and 2013-05-31 00:00 for the End Date.

4	Quic	k Simulation W	izard		×
Quick Simulation	: Select Time Range				
Set a range of sta	rt and end times for the simulation	on.			1
Start Date					
Start date for th	e simulation				
Start Date:	2013 05 31 22:25	Cat Data			
Start Date.	2013-03-31 22.23	Set Date			
End Date					
End date for the	e simulation				
End Date:	2013-06-01 00:00	Set Date			
WESSI Script					
WESSE Script					
Provide the nar	ne of the WESSL script to run with	h the simulation.			
WESSL Scrip	t: demo2				0
WARNINGS SETTI	NGS				
Check box if the	e warnings should be removed fo	r the WFO.			
Remove wa	arnings for the WFO				
		< Back	Next >	Finish	Cancel

- 15. Under the WESSL Script, select the script name created in Step 3, and click the Finish button.
- **16.** Click **OK** on the available memory popup window, and note when the WESSL2 window and Simulation Controls window pops up.
- 17. Click the PLAY button on the Simulation Controls window.
- 18. WESSL2 will pop up your events as you created them.