



## Module 5: Reporting

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# Module Objective: Helpful Tips on Reporting Features

- Test & Verification Event Matrix
- Developmental Evaluation Framework
- Assessment Reports
  - Test Cases
  - Use Cases
- Requirement Verification Burn-up\down Reports
- Ad-hoc SQL Reporting

- iRIS Administrator Creates TVEM Report Structure and Grants “Read” Access to Users

Requirements Specifications Verifications

- 1. Event Integration Sheets
- 2. Verification Planning Metrics
- 3. Requirement Count Per Event
- 4. Event Status by Specification
- 5. Burn\_up Report
- 6. Results for an Event Integration
- 7. Event Coordination Matrix
- 8. V&V Effectivity Analysis
- 9. EIS Team Analysis
- 10. Blank EIS
- 11. Results by Specification
- 12. Developmental Evaluation

Event Coordination Matrix

Open Event Matrix

Request Access to Specific TVEM if not Listed

Requirements

Export to Excel

Preview

Export

☒ Show only requirements allocated to events

Uncheck this box if you want TVEM to display requirements that have not been allocated to events

Spec N...	Requir...	Para N...	Name	Descri...	Verif M...	cat1	Cyber...	CSV	CDD M...	Allocat...
02) Gr...	BVICD...	3.7	Trans...	The m...	Test					2
02) Gr...	BVICD...	3.9	Slot A...	This is ...	Test	0				1
02) Gr...	BVICD...	4.6	Conne...	The ty...	Demon...	0				4
03) Pa...	JPSS...	6.1.3.9	Comm...	The JP...	Demon...	0		Priorit...		1
04) Bo...	GS-013	4.3	Built In...	The S1...	Demon...	0				1
04) Bo...	GS-014	4.4	Built In...	The co...	Demon...	0				2
05) Ro...	BST1...	4.6	Booste...	The Bo...	Inspec...	0				1
05) Ro...	BST1...	5.3	Booste...	The Bo...	Test	0				1
07) Bo...	CA-007	3.7	Nozzle...	For mu...	Analysis	0				2
07) Bo...	CA-024	4.14	TVC Pi...	TVC M...	Test					1
08) In...	IMU-013	4.3	Mass P...	The IM...	Analysis	0				3
08) In...	IMU-017	4.7	Scale f...	Scale f...	Inspec...	0				1
09) +2...	BATT...	5.2	Mass p...	The Ba...	Test		0			1
10) Cy...	GS-AC...	AC-16...	Securit...	The or...		0	0			1
10) Cy...	GS-PS...	PS-4(1)	Person...	The or...		0	0			1

# TVEM Resource Utilization Report

**Reports**

Requirements Specifications Verifications

1. Event Integration Sheets
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**Open Event Matrix**

Select a column header here to group by that column

Name	Created	Created By
2	11/28/2020 11:05:5...	Ray, Delia

Event Coordination Matrix

Resources Requirements Resources

Export to Excel

Open Selected

**Resource Utilization**

• Yellow shading indicates resource utilization conflict exists

Conflict Status	ResourceType	ResourceID	ResourceName	EIS Number	EIS Title	EIS Developer
	Facility	Fac-14	Bldg 100 Analysis Lab	1008-Batt	1008-Batt	Martin, Cra
	Facility	Fac-08	Missile Assembly Building	1009-Batt	1009-Batt	Ford, G
	Facility	Fac-09	Launch and Checkout Facility	1010-Batt	1010-Batt	Car
	Facility	Fac-10	Transition Support Facility (TSF)	1011-Batt	1011-Batt	Car
	Hardware	HW-014	MOI simulator	1012-NCU	1012-NCU	G
	Hardware	HW-016	3DOF Simulator	1013-NCU	1013-NCU	G
	Hardware	HW-019	N2 Gas Supply	1014-NCU	1014-NCU	G
	Hardware	HW-004	Ground Interface Power Supply	1015-NCU	1015-NCU	G
	Hardware	HW-026	Consoles	1016-NCU	1016-NCU	G
	Hardware	HW-007	BV ground I/F test emulator	1017-NCU	1017-NCU	G
	Hardware	HW-045	C2 System I/F emulator	1018-NCU	1018-NCU	G
	Hardware	HW-009	Payload Flight Unit	1019-SIBST	1019-SIBST	G
	Hardware	HW-001	1-Ka-band Ground Terminal Interface Emulator	1020-SIBST	1020-SIBST	G
	Hardware	HW-012	Payload handling and transportation fixture	1021-SIBST	1021-SIBST	G
	Hardware	HW-005	Booster Interface Emulator test Unit	1022-SIBST	1022-SIBST	G
	Hardware	HW-047	Guidance Section Emulator (GSE)	1023-SIBST	1023-SIBST	G
	People	Per-048	Kalman Filter Engineer	1024-SIBST	1024-SIBST	G
	People	Per-035	Payload Reliability Analyst	1025-SIBST	1025-SIBST	G
	People	Per-007	BMC3 Support Engineer	1026-SIBST	1026-SIBST	G
	People	Per-021	Battery Support Engineer	1027-SIBST	1027-SIBST	G
	People	Per-025	Control Actuator Data Analyst	1030-PLD	1030-PLD	G
	People	Per-027	FFRDC Trajectory Analysis Engineer	1031-PLD	1031-PLD	G
	People	Per-028	FFRDC Payload Analysis Engineer	1032-PLD	1032-PLD	G
	People	Per-029	FFRDC Payload Reliability Engineer			G
	People	Per-020	Power Distribution Analyst			G
	People	Per-049	Orbital Dynamics Engineer			G
	People	Per-022	Flight Test Unit Support Engineer			G
	People	Per-050	Constellation Analyst Engineer			G
	Software	SW-001	Air Vehicle Flight Software Test Suite			G
	Software	SW-011	Payload Flight Software Test Suite			G
	Software	SW-029	FMECA Analysis Software Tools			G
	Software	SW-014	Delta-V Planning Tool			G

- Select "Resources" from drop-down to observe resource allocations.

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# Developmental Evaluation Framework (DEF)

- iRIS Administrator Creates DEF Report Structure
- All Users can view DEFs
- DEF Scoring is Auto-generated
  - Admins and Event Owners can Manually Override DEF Scores

**AD#3-- JPSS-1 Payload Mission Readiness :Mission Readiness**  
Company ABC - Company ABC: 1

**Score Sheet**

	A	B	C	D
1				
2				
3			K-DSQ #1	K-DSQ #4
4			Ka-band data to ground terminals?	Is the reliability
5	<b>Performance</b>			
6		BVICD-011	Booster Ka-band Antenna Characteristics	<u>1038-PLD</u>
7		BVICD-018	Booster Ka-band Antenna Pattern	<u>1064-GSS</u>
8	K-DEO #1- Ka-band Data Transmission	GS-007	GS Ka-band Antenna Characteristics	<u>1019-S1BST</u>
9		JPSS_009	Payload Ka-band Data Transmission	<u>1039-PLD</u>
10		JPSS_013	Payload Ka-band Emitter Data Requirements	<u>1019-PLD</u>
11		SYS-017	System Ka-band Emitter RF Requirements	<u>1069-SYS</u>
12	<b>Reliability</b>			
13		BATT-005	Battery Reliability	<u>1009-Batt</u>
14	K-DEO #6-Reliability	BST1-013	Booster Reliability	<u>1022-S1BST</u>
15		JPSS_005	Payload Reliability	<u>1037-PLD</u>
16		SYS-020	System Reliability	<u>1038-PLD</u>
17	<b>Interoperability</b>			
18		BVICD-001	Connectors and Adapters	<u>1061-GSS</u>
19	K-DEO #2-Interface requirements	BVICD-005	Directional Couplers	<u>1061-GSS</u>
20		BVICD-006	Splitters and Couplers	<u>1022-S1BST</u>
21		JPSS_009	Payload Ka-band	<u>1039-PLD</u>
22	<b>Cyber security</b>			
23		BST-022	Booster Secure Data	<u>Not Allocated</u>
24	K-DEO #5-Secure operations	BVICD-020	GS Secure Data Transmission	<u>1019-S1BST</u>
25		JPSS_032	Payload Secure Data	<u>1039-PLD</u>
26		SYS-027	Secure Data Transmission	<u>1069-SYS</u>

**Verification Status Color Code Legend**

Formal Verification	Risk Reduction
Met	Met
Open	Open
Not Tested	Not Tested
Partial	Partial
Not Met	Not Met

• Underlined font means score was manually overridden

• Standard font means score was auto-generated

- Test/Use Case Assessment Reports Provided by iRIS Admin by Request

Hello, Ray Delia. Welcome to iRIS Version 5.1 Build: 286alpha - ICBM

Home Administration Imports Deletions Program Requirements Cybersecurity Verification Hazards Reporting Help Logoff

Roster Teams Program Options MS Project Interface Setup User History Admin Features Web Service User Mapping Assessments Gantt View TEMP Generation AD / DEF Scorecard Event Resources Update MS Project Import VSS/REQ Links Flow V2 Import Verifications Rename Utility

**Requirements** Specifications

**Verification**

**Resources** Facilities

**Assessments**

Assessment Category

Name	Description	Order
Test Case 123		0
Test Case 456		0
Use Case 123		
Use Case 456		

Interactive Report Edit Update Delete Add New Manage Types

Assessment Subcategory

Name	Description	my Order
Nominal		
Off-nominal		

**Verification Status Color Code Legend**

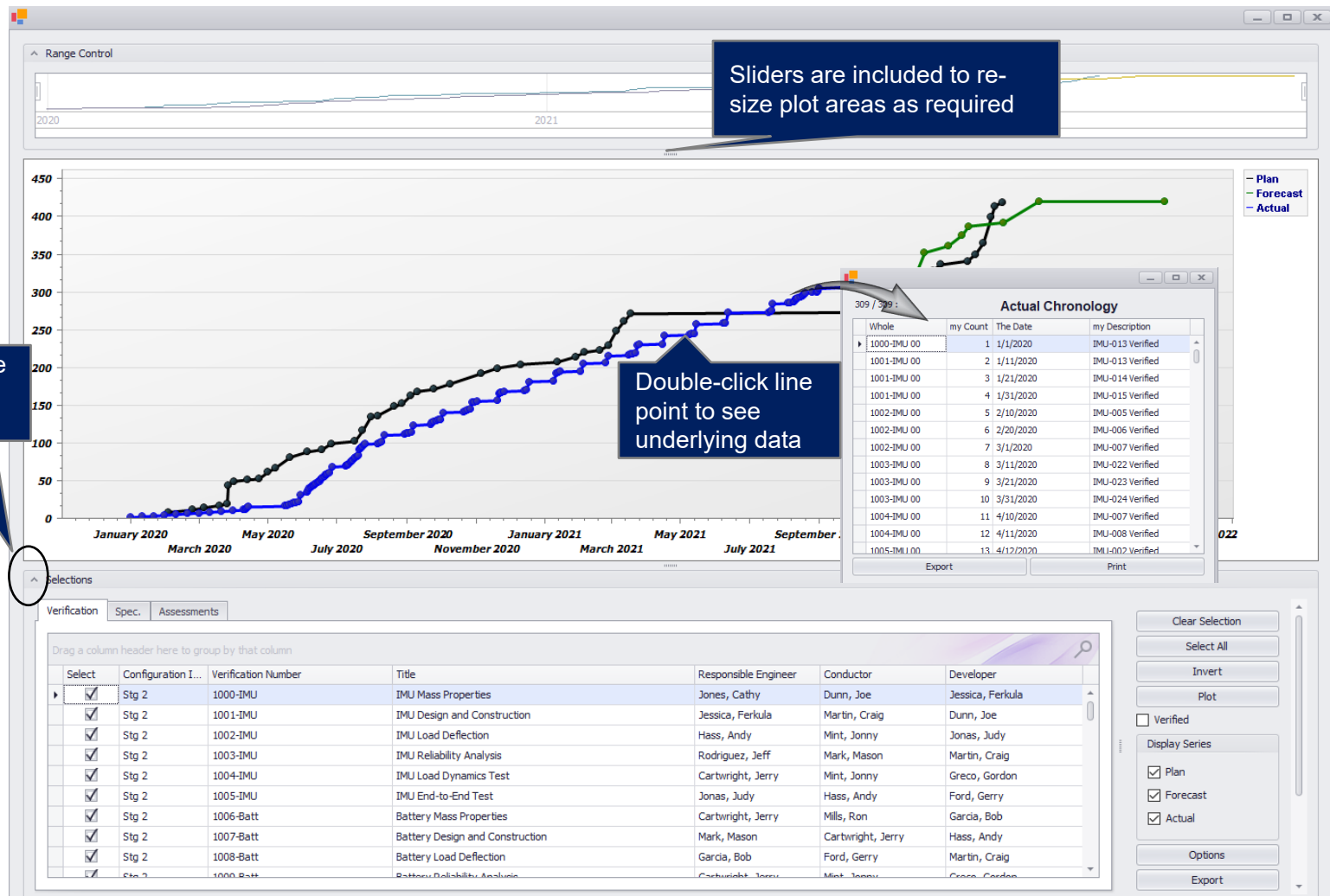
Formal Verification	Risk Reduction
Met	Met
Open	Open
Not Tested	Not Tested
Partial	Partial
Not Met	Not Met

**Legend:**

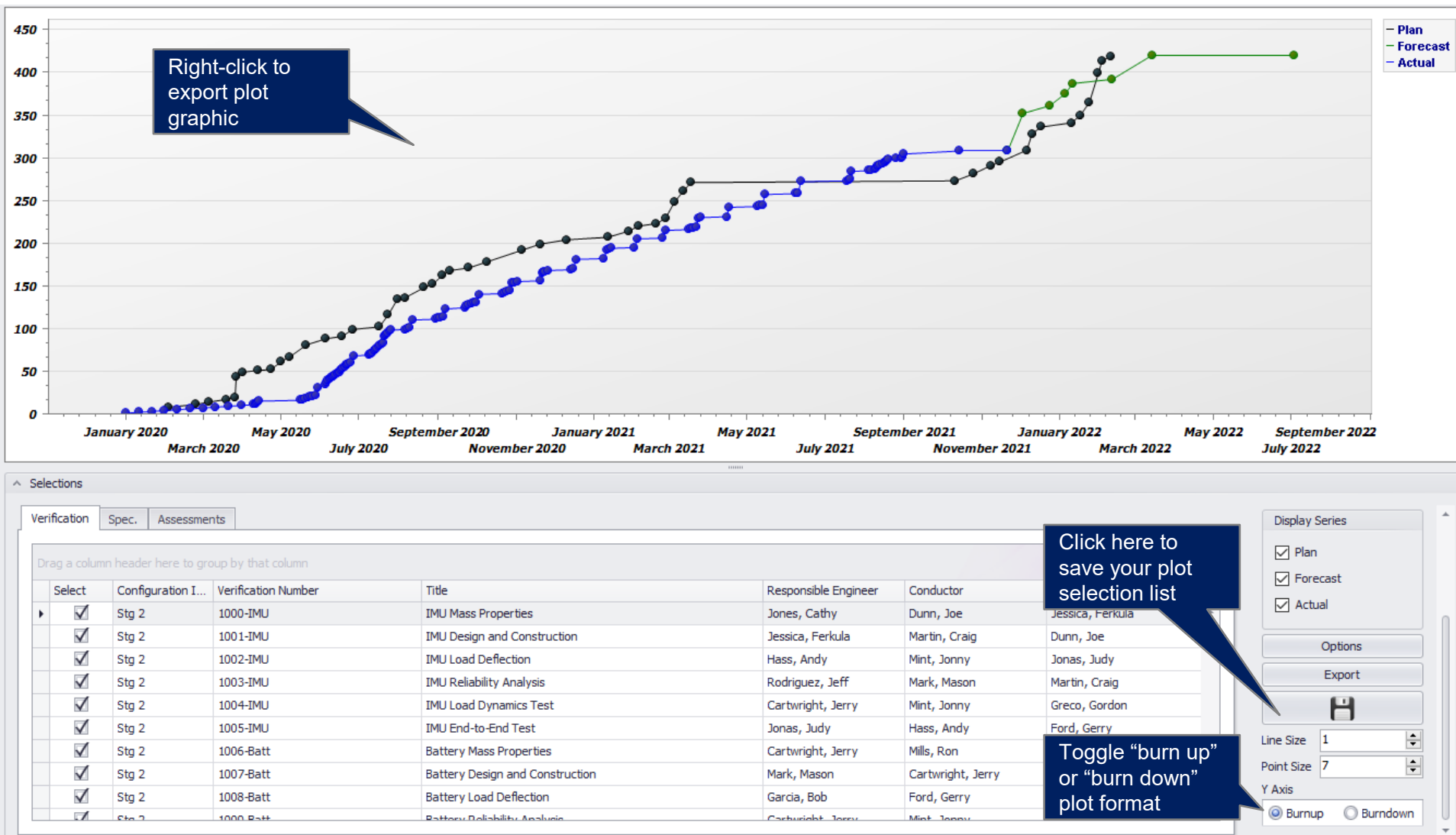
Level	Requirement Name	Event Count	1064-GSS	1065-SYS	1069-SYS	1070-SYS
Test Case 123			Test Case 123	Test Case 123	Test Case 123	Test Case 123
Nominal			Nominal	Nominal	Nominal	Nominal
BVICD-015	Power Capability	2	BVICD-015			BVICD-015
GS-004	Power Utilization	2	GS-004			GS-004
GS-005	Power Transfer Capability	1	GS-005			
GS-006	GS Power Xrf Capability	1	GS-006			
GS-008	Discrete signal noise immun.	1	GS-008			
GS-012	GS Power Enable	1			GS-012	
GS-016	28 VDC Output Power	2		GS-016	GS-016	
GS-017	Adapter Avionics Power	1		GS-017		
Off-nominal						
ICD808-752	Mission Operations Transfer	1				
ICD808-753	Mission Operations Transfer	1				
ICD808-758	Communications	1				
ICD808-76	Communications	1				

# Requirement Verification Burn-up\down Reports

Time-phased line chart representation of plan, forecast and actual requirement verification status for individual specifications as well as groups of events.



# Requirement Verification Burn-up\down Reports (cont'd)





Home Administration Imports Deletions Program Requirements Cybersecurity Verification Hazards Reporting Help Logoff

Review/Print Reports Ad Hoc Reports

iRIS Reporter

Report List Report Edit Pivot Chart

SQL Statement

```
/****** Script for SelectTopNRows command from SSMS *****/  
SELECT TOP 15000 [ID]  
,[RequirementNumber]
```

Clear SQL Save Report

LayoutControlGroup6

Report Name: Formal Requirement Tagging

Report Description: Report provides comprehensive list of all requirement IDs and the formal events they have been assigned to. Ver ID (Event ID) will be "none" if a formal event has not been assigned.

Visible Pages: ☒ Pivot ☒ Chart

Chart Type: Line

Palettes: Apex

Starting Page: ☒ Pivot ☐ Chart ☐ Report ☐ Active Report Type:

Result Preview

Drag a column header here to group by that column

Export Preview Delete Report Update

Association String: System.Windows.Forms.TextBox, Text:

ReportWizard

- iRIS Admin can generate ad-hoc reports by request.
- Best to use excel to model the data when making request.
- Reports available to all users when complete.