JCSS Version 7.0
Software Release Bulletin (SRB)

January, 2008

Prepared by:
Defense Information Systems Agency

Document change history

Version Number	Date	Description
JCSS 7.0	January, 2008	JCSS 7.0 SRB
NETWARS 2006-2.1	March, 2007	NETWARS 2006-2.1 Updated SRB
NETWARS 2006-2	December, 2006	NETWARS 2006-2 SRB

Disclaimer: As of October 2007, NETWARS was re-designated by the Program Manager Office as the Joint Communications Simulation System (JCSS). JCSS was selected as the new industry name to better reflect the inherent joint communication capabilities of the software. Users should be aware that no software updates were conducted as part of the software name change.

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1. INTRODUCTION TO JCSS 7.0

1.1   What is this Document?

The JCSS 7.0 Software Release Bulletin (SRB) provides an overview of JCSS 7.0 Software Release. Specifically, it describes new features, known errors, and provides usability guidelines. The SRB also gives JCSS users detailed instructions for installing the software and getting JCSS-specific software support.

This document contains:

- An overview of the 7.0 release of JCSS

- A list of JCSS contacts for questions or comments

- A description of the installation process and system requirements

- Additional notes on important topics relating to the use of JCSS

- Information on how to use the JCSS help desk and report problems

- A glossary of terms and acronyms used in JCSS

- A list of known issues in the current JCSS release

The JCSS Web page can be accessed at http://www.disa.mil/netwars/

For software CM support, please contact JCSS Configuration Manager via email at NETWARS_CM@disa.mil.

1.2   What is JCSS?

Joint Communication Simulation System (JCSS) is the Joint Chiefs of Staff and DISA standard for modeling military communications networks. It is a desktop software application that provides modeling and simulation capabilities for measuring and assessing the information flow through Strategic, Operational, and Tactical military communications networks.

During the 1997 Quadrennial Defense Review (QDR), the Joint Staff discovered that the effects of improved communications on battle outcome could not be adequately represented by any of the current models. The Director for Command, Control, Communications and Computer (C4) Systems (DJ6) initiated JCSS to address this shortfall.

1.2.1   JCSS Capabilities

- Realistically simulates battlefield communications

- Allows for rapid construction, "what-if" drills, and modifications to warfighter communication architectures in support of operation plans (OPLAN) development, modification, and execution

- Users can configure organizational structure, scenarios, architectures, communication
device models, and information exchange requirements (IER)

- Promotes interoperability of communication device models and traffic models built by
individual Services and Agencies

- Provides guidelines for model development

- Advances the ability to validate current and future acquisitions

- Has the flexibility to assess communications at all levels of conflict and organizational constructs

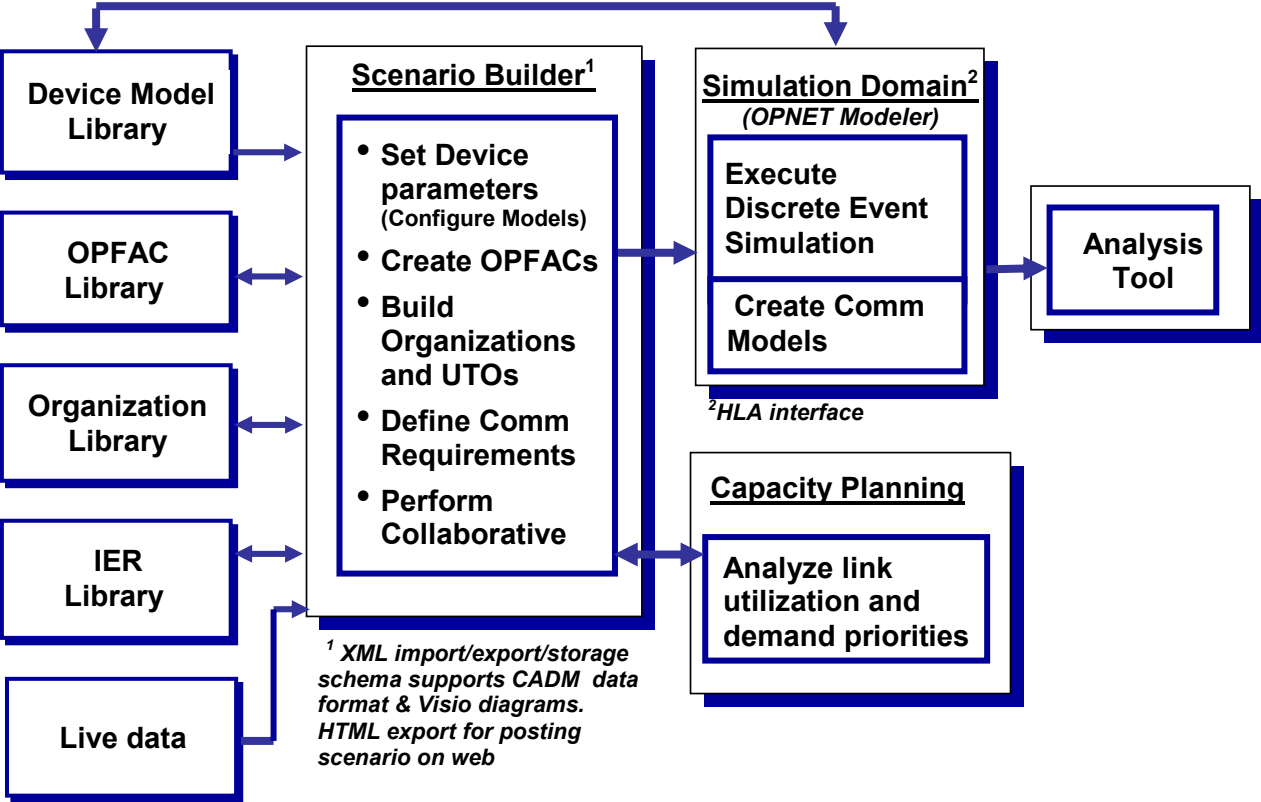### 1.2.2   Warfighters and Operational Planners

- High-level planning and performance assessments of military networks
- Rapidly construct, update and visualize network plans
- Collaboratively plan network topologies
- Develop reusable device and traffic models
- Share network plans and information (e.g., HTML and PowerPoint)
- Develop network plans based on equipment inventories

1.2.3   Analysts and Acquisition Specialists

- Assess the impact and performance of applications, network layer technology, and deployment strategies
- Advance common network modeling and simulation framework and standards
- Develop and promote interoperability of device models and traffic models
- Support wargaming and the evaluation of emerging technologies
- Validate current and future acquisitions

Figure 1 illustrates the functional architecture of the JCSS system. The architecture contains five primary components; libraries, the scenario builder, the simulation domain, the capacity planner and the results analyzer. More information regarding the features and capabilities associated with each component can be found in the JCSS 7.0 User Manual.

Figure 1 - JCSS Functional Architecture

| Device Model Library | | Scenario Builder[1] | | Simulation Domain[2] *(OPNET Modeler)* | | Analysis Tool |

- **Set Device parameters** (Configure Models)
- **Create OPFACs**
- **Build Organizations and UTOs**
- **Define Comm Requirements**
- **Perform Collaborative**

Execute Discrete Event Simulation

Create Comm Models

[2]*HLA interface*

OPFAC Library

Organization Library

IER Library

Live data

[1] *XML import/export/storage schema supports CADM data format & Visio diagrams. HTML export for posting scenario on web*

Capacity Planning

Analyze link utilization and demand priorities

2. WHAT'S NEW IN JCSS 7.0

The following section provides general information on some of the new GUI features and models introduced in JCSS 7.0.

2.1   JCSS 7.0 New and Enhanced GUI Features

- **OPNET CORE:**
  - JCSS 7.0 is based on OPNET CORE 14.0 PL3.
- **Launching Modeler from JCSS**:
  - JCSS 7.0 allows user to install OPNET Modeler 14.0 and launch it from within the software. The user will need a license to launch Modeler.
  - If you plan on using OPNET Modeler with JCSS, it is strongly recommended that you use the integrated version of Modeler. This will avoid license related software problems.
- **Nested Promina Circuit Support**:
  - In previous releases of JCSS, there was no support for routing Promina circuits over Promina Circuits. A WAN side port of the Promina could only be connected to the WAN port of other Prominas. JCSS 7.0 provides support for nested Prominas. *For more information, please refer to the Promina Model User Guide.*
- **Enhanced LinkTypeMap file**:
  - JCSS 7.0 provides support for per-project linktypemap.gdf files in addition to the current global linktype.gdf file. Users are now allowed to save their custom link-types on the linktype.gdf file.
- **GBS Satellite Link Wizard**:
  - Link Deployment Wizard was modified to now provide support for GBS Satellite Links.
- **Unified GUI for JCSS Circuit Configuration**:
  - JCSS 7.0 introduces a Generic Circuit API that allows users to not only deploy JCSS standard circuits (i.e. Prominas, SCREAM, CTP) through a single circuit deployment but also allows the user to integrate individually customed models. This means that any type of circuit can be created to work with the JCSS Circuit Deployment Wizard allowing the user to have the same GUI interface and visualization for all circuits inside a scenario. Also, with this workflow, users can then leverage additional Discrete Event Simulation (DES) APIs, Capacity Planning, Logical Views, and other NETWARS functionality with their custom models.
  - *Please see the Promina, CTP Model User Guide for further information.*
- **Link 16 Logical View and Capacity Planner Support.**
  - Capacity Planner has been modified to allow traffic to pass through a link-16 network. Link-16 radio link are not visible in the Scenario Builder but a new a series of Logical Views have been made available to view Link-16 and NPG topology. NPG Capacity Planning results are available through "View Results" and through the Capacity Planner Web Report. *Please refer to the Link-16 Model User-guide for additional information.*

- **UHF DAMA CP Support:**
  - Capacity Planner has been modified to allow traffic to pass through a UHF DAMA network. Capacity Planning results for each Service are available through the "View Results" menu and not the Capacity Planner Web Report. Please refer to the UHF DAMA model user-guide for additional information.

2.2 JCSS 7.0 New Network Communication Device Models

JCSS 7.0 introduces several new communication models described below. Please note that as the program continues to develop more enhanced communication device models, some of the older models are deprecated and placed under the deprecated folder. Please refer to the JCSS CDM V&V to view a list of all the deprecated models. The table below provides a quick summary of the new and enhanced device models in JCSS 7.0.

Name	New/Enhanced/Inherited	Version Introduced
PRC Radios	New	2007
Juniper CTP	New	2007
PSC Radios	New	2007
EPLRS	New	2007
ShoutIP	New	2007
SCREAM	New	2007
FCC_100 max speed for port	Enhanced	2007
H.323	New	2007
Promina support for nested circuits	Enhanced	2007
VTC enhancements to dnvt	Enhanced	2007
TCP PEP enhancements with TAO	Enhanced	2007

- **SHOUTip:**
  - JCSS 7.0 now features the SHOUTip device from N.E.T Inc. which serves as a gateway conversion device. The main types of conversion involve transferring voice signaling and date between legacy voice networks and IP networks. *Please refer to the H.323 or Voice Model User Guides for additional information.*

- The JCSS SHOUTip provides support for both SIP and H.323 signaling but does provide support for BSP Signaling. Possible configurations include:
  - PSTN to SHOUTip to PSTN
  - PSTN to SHOUTip to SIP
  - PSTN to SHOUTip to H.323
  - PSTN to SHOUTip to H.323, SIP to SHOUTip to PSTN
  - VoIP network to SHOUTip to PSTN to SHOUTip to VoIP
  - H.323to SHOUTip to SIP
- **H.323:**
  - JCSS 7.0 now feature new support for the H.323 protocol. Deploy Border Elements, Gatekeepers, Gateways and H.323 Terminals to allow for VoIP to Analog communication. *Please refer to the H.323 Model User Guide for additional information.*
- **SCREAM:**
  - SCREAM supports Circuit Emulation over an IP or ATM network, ATM switching, Ethernet routing and IP routing all on one single node. The JCSS SCREAM model can be found under the NETWARS Standard Pallette. *Please see the CTP Model User-guide for further information.*
- **CTP:**
  - Circuit-to-Packet (CTP) devices from Juniper Networks, Inc., allow serial data streams to be converted into IP packets at a source CTP device. After being received by a destination CTP device from the IP network, they are converted back to the serial stream. *Please see the CTP Model User-guide for further information.*
- **PRC:**
  - The PRC radio model was developed to simulate the operation of real world radio device. It implements a NAD scheme described in MIL-STD-188-220D and simulates both voice and data traffic that are sent within a broadcast network. The following radio models were deprecated as part of the radio model cleanup (Sincgars, HF, VHF, UHF, Havequick) but are available in the deprecated folder.
- **EPLRS_RS:**
  - JCSS 7.0 introduces a new high fidelity EPLRS model that provides support for different types of needlines including HDR and CSMA. The EPLRS ENM (EPLRS Network Manager) and EPLRS RS (Radio System). *For additional information, please refer to the EPLRS Model User-guide and sample EPLRS scenario that ships with the software.*
  - CSMA: In a CSMA Needline, all radio share the same time/frequency resources. Any radio can be a source and is the most widely used needline type.
  - HDR: This is a predefined one-to-one communication where time and frequency are reserved for each HDR needline.
- **VTC Model Enhancement:**
  - VTC support is now fully integrated into the NETWARS Circuit Switch model so the same circuit switch that support phones now supports VTC

traffic. The VTC architecture was modified to provide support for a 384Kbps channel which is more closer to a real world VTC architecture. The old VTC models have been deprecated and placed in the deprecated folder.

- o MCU device was modified to act as an end device to generate/received VTC calls.

2.3   JCSS 7.0 Sample Project Files

- ▪ The JCSS PMO has continued to focus on enhancing usability by developing capability scenarios to be shipped with the software. JCSS 7.0 introduces the following new capability scenarios:
- ▪ **JCSS JCAS**
  - o A Joint Close Air Support (JCAS) scenario was developed in NETWARS to represent an operationally relevant scenario at the tactical edge configured with wireless communications assets. *Please refer to the JCAS Model User-guide for additional information.*
- ▪ **JCSS EPLRS_RS**
  - o The JCSS EPLRS scenario focuses on the newly developed high fidelity EPLRS_RS model that introduces HDR and CSMA needlines. *Please see the Codes of Best Practices for additional information.*
- ▪ **JCSS JNN**
  - o The JCSS JNN scenario was developed using the JNN library templates. *Please see the Codes of Best Practices for additional information.*
- ▪ **JCSS QoS**
  - o This scenario contains a variety of IP QoS functions that are designed to provide differentiated QoS to each of the configured service classes. This scenario is the simpler version of the DISA EWSE QoS scenario.

For additional information on these capability scenarios, please refer to the JCSS Codes of Best Practices. JCSS 7.0 also introduce several new Pre-Configure Templates including the following:

- ▪ **CITS (Combat Information Transport System) Template:** CITS Block 30 is a major redesign of the Air Force unclassified and classified NM/ND system. The new architecture emphasizes an AF Intranet with standard boundaries. The templates show the various AF CITS network Architecture.
- ▪ **JNN:** JCSS 7.0 also contains the Army JNN pre-configured network templates.
- ▪ **Satellite Templates:** These pre-configured satellite templates include the following:
  - o DSCS ELNT Primary
  - o DSCS EPAC Primary
  - o DSCS EPAC Reserve
  - o DSCS IO Primary
  - o DSCS IO Reserve

- o DSCS WLNT Primary
- o DSCS WPAC Primary
- o DSCS WPAC Reserve
- o Inmarsat 4 F1
- o Inmarsat 4 F2
- o Inmarsat 4 F3

2.4   JCSS 7.0 Document List

The JCSS program develops and maintains a library of documents. These documents are intended to help the user understand what JCSS is and how they can use it.   A portion of the JCSS document library is included with each release. Users can find these documents on the first installation disk under the <Drive>:\JCSS\Documents folder.   Users can also find these documents in the <Drive>:\JCSS\Documents folder after a successful installation. The following table lists the documents provided with JCSS 7.0.

Title	Purpose	Summary of Contents
JCSS 7.0 Software Release Bulletin	Overview of the JCSS 7.0 Software Release	▫ New Features ▫ Usability Guidelines ▫ Known Errors
JCSS 7.0 User Manual	Guide to basic aspects of JCSS operation and use	▫ Topology Building ▫ Traffic Specification ▫ Capacity Planning ▫ Simulation Execution ▫ Result Analysis ▫ Glossary
JCSS 7.0 Technical Reference Manual	The JCSS Technical Reference Manual is a comprehensive reference and guide that covers all aspects of JCSS operation and use	▫ JCSS Editor Descriptions ▫ Menu Descriptions ▫ Visual examples of the JCSS interfaces ▫ Step-by-step procedures, and other important JCSS features and concepts ▫ Glossary
JCSS 7.0 System Administrator's Manual	Comprehensive reference and guide that covers all aspects of JCSS installation, operation and use	▫ User Profile Administrator ▫ IER Database ▫ Glossary ▫ Directory Structures
NETWARS System Security Authorization Agreement (SSAA) (Table of Contents Only)	Current draft SSAA for your reference in preparing DITSCAP requirements for your own site. Since, the full SSAA is For Official Use Only (FOUO), only the Table of Contents in included.	▫ System Security Requirements and Appendices

Title	Purpose	Summary of Contents
JCSS 7.0 Code of Best Practices	Documents lessons learned and best practices from past studies to provide to future JCSS study teams proven processes, insights and guidelines.	□ Guide for JCSS Study Lead □ Guide for JCSS User/Analyst □ Detailed information on JCSS capability scenarios
JCSS 7.0 Task Assistant Overview	Overview of the JCSS 7.0 Task Assistant	□ JCSS System Overview □ Sections describing purpose and user types □ Complete workflow outlines
JCSS 7.0 Model Development Guide (3.1)	Standards documents for designers and developers of communication device models.	□ Functional overview includes. Overview of the system, technical introduction to JCSS modeling □ "Building & Testing JCSS Models" (End-System, Networking, Circuit-Switch, Radio, Link, Operational Element)
JCSS 7.0 Communications Device Model V&V Report	Results of V&V activities conducted to determine if the developed communications models meet specific documented requirements and if they reasonably represent the implicit functional performance of the actual systems.	□ Executive Summary □ Model by Model Results and Recommendations for JCSS Standard Models □ Dynamic and Static MDG Test Results
JCSS 7.0 Capacity Planning V&V Report	Results of V&V activities conducted to determine if the developed Capacity Planner and associated features meet specific documented requirements and if they reasonably represent the performance of actual networks.	□ Capacity Planning Overview □ Test Results □ Validation results □ Conclusions
JCSS 7.0 Model User-guides	Detailed descriptions on many of the existing and new JCSS communication models.	□ CTP Model User Guide □ H.323 Model User Guide □ EPLRS Model User Guide □ Link16 Model User Guide □ Promina Model User Guide □ PEP Model User Guide □ Voice Model User Guide □ UHF SATCOM Model User Guide

2.5   Points of Contact

Table 2 – JCSS Points of Contacts

Maj. Donald Worden **JCSS Project Manager, DISA / GE344** P.O. Box 4502 Arlington, VA 22204-4502 E-mail : Donald.Worden@disa.mil Telephone: 703-681-0399	**Mr. David Coe** **Branch Chief , DISA / GE344** P.O. Box 4502 Arlington, VA 22204-4502 E-Mail: David.coe@disa.mil Telephone: 703-681-4676
Mr. Vijay Kumar **JCSS Requirements & Software** **Development, DISA / GE344** P.O. Box 4502 Arlington, VA 22204-4502 E-mail : vijay.kumar@disa.mil Telephone: 703-681-2625	**Ms. Carroll Mitchell** **JCSS Software CM & A&S WIPT** **DISA / GE344** P.O. Box 4502 Arlington, VA 22204-4502 E-mail : Carroll.Mitchell@disa.mil Telephone: 703-681-4688
Mr. Chuong Truong **JCSS Technical Lead, DISA / GE344** P.O. Box 4502 Arlington, VA 22204-4502 E-mail : Chuong.Truong@disa.mil Telephone: 703-681-2560	

3. JCSS INSTALLATION

3.1   JCSS Installation Instructions

For JCSS installation instruction, please refer to the "JCSS Installation Procedure Manual".

3.1.1   Hardware Requirements

To run JCSS Release 7.0, your machine must meet the following minimum requirements:

- Windows 2000/XP Operating System
- 1 GHz Pentium III CPU
- 512 Mb of RAM
- 1 GB of hard disk space available
- Minimum screen resolution is 1024x768
- Minimum of 256 colors

Recommended: 1 GB of RAM, CPU speed 1 GHz or higher, and 65,000 colors (16 bit)

3.1.2   Software Requirements

- JCSS Release 7.0
- Microsoft Visual 2005.net (only needed to run simulation requires recompilation)
- TCP/IP protocol on your machine

3.2   License Requirements

3.2.1   Licenses Types

JCSS 7.0 has an embedded license structure. Given this license structure, you will no longer need to exchange transaction codes to perform your license registration.   Just simply install the software and you will be ready to start using the software. Keeping this in mind, you will not require your old JCSS licenses from this point on. Please contact the JCSS Configuration Manager at NETWARS_CM@disa.mil or 703-902-5628 to de-register your old licenses.

The JCSS program management office has purchased multiple JCSS license from OPNET Technologies, Inc. User must contact the JCSS PMO to request the JCSS software/license. An OPNET Simulation Runtime or OPNET Simulation Site license is required if running simulation. Users are responsible for procuring their own OPNET Simulation license.

The **table 4** explains the relationship between the license and the software functionality.

Table 4 – JCSS Licenses

Licenses	Requirement
JCSS (bundled of NetBiz, TMM, MVI)	Necessary for basic JCSS functionality Necessary to use terrain visualization capabilities in JCSS' Scenario Builder Necessary to use terrain visualization capabilities in JCSS' Scenario Builder
OPNET Simulation Runtime or Simulation Site	Necessary to run the discrete event simulation engine of JCSS. (This license may be included in Modeler)

3.2.2 Obtaining Software/license

If you need new or additional software/licenses, you need to complete the JCSS justification form available on www.disa.mil/netwars. For further assistance, please contact the JCSS CM via email NETWARS_CM@disa.mil. If approved by the JCSS PMO, the JCSS CM will issue you the software/license.

3.2.3 Lessons Learned with JCSS Licenses

If the OPNET license manager needs to be moved or deleted, please make sure to remove the license before deleting the manager. The process is nearly identical to the process of installing the license. If licenses are not removed before moving or deleting the license manager, they will become "lost" and will NOT be available to other users until the JCSS CM has identified the loss of the license and subsequent paperwork is completed to confirm the loss with OPNET Technologies.

To avoid this problem, please contact the JCSS CM via email NETWARS_CM@disa.mil or JCSS Tech Support (240) 497-3313, extension 2699 before deleting or removing the license manager.

3.3 Security Considerations

The JCSS Program received its Authority to Operate (ATO) from the DISA Designated Approving Authority (DAA). Our System Security Authorization Agreement (SSAA) documents the security certification and accreditation of JCSS in accordance with DOD Instruction 5200.40, the DOD Information Technology Security Certification and Accreditation Process (DITSCAP). Our SSAA includes "type" certification and accreditation documentation, and is useful in preparing the required documentation for your local DAA. Your local DAA will also need to consider local security test and evaluation considerations that verify local security measures are in place. You may obtain a copy of the JCSS SSAA from Ms. Carroll Mitchell (See JCSS Points of Contact).

4. KNOWN JCSS 7.0 SOFTWARE ISSUES

4.1 Critical Software Problem Reports

The following are some of the software problems that were identified during software testing and model verification. These software problems will be addressed in later version of the software.

For more information on the severity ranking of these problems, please refer to the CDM V&V. For more information on any of the problems shown below, please contact the JCSS CM at NETWARS_CM@disa.mil.

#	SPR ID	Description	Problem Type	Severity
1	4871	▪ **Problem:** Users might see a software exception when attempting to clear traffic deployment of ace files that is no longer in mod_dirs directory ▪ **Recommendation:** Clear ACE traffic using deployment wizard before removing the ACE traffic files from mod-dirs	CORE	1
2	5326	▪ **Problem:** Failing to re-deploy a circuit properly results in project instability and program aborts ▪ **Recommendation:** User must re-deploy a new circuit using the Circuit Wizard	CORE	1
3	5540	▪ **Problem:** Right clicking an invalid device after selecting Edit Similar Nodes results in a program aborts ▪ **Recommendation:** The Right click Edit Similar Nodes menu has been disabled until we receive CORE fix	CORE	1
4	5688	▪ **Problem:** Program Abort when performing View>Show Network Showcase ▪ **Recommendation:** Instead of using CORE Logical View Showcase, user must use the NETWARS Logical View	CORE	1
5	5692	▪ **Problem:** Performing copy & paste of links may lead to software instability ▪ **Recommendation:** User should deploy new links via the link deployment wizard	JCSS	1
6	4878	▪ **Problem:** NETWARS CP Optimization changes results unexpectedly ▪ **Recommendation:** Recommend user save copy of their scenario, create a duplicate scenario and then	JCSS	2

		run CP optimization to evaluate results		
7	4984	▪ **Problem:** Threaded IER's reporting system does not work properly ▪ **Recommendation:** Threaded IERs will be cleaned up in JCSS 8.0	JCSS	2
8	5038	▪ **Problem:** Paths and demands will not be restored after an undo of a delete operation ▪ **Recommendation:** After deleting the paths, it is recommend that the user re-define a new path and not perform an undo	JCSS	2
9	5042	▪ **Problem:** The cut-through mechanism on the crypto device sends the incoming packets to the outgoing link with the speed they arrive. ▪ **Recommendation:** Recommend user be aware of the discrepancy in the results and account for them. This problem will be addressed in JCSS 8.0.	JCSS	2
11	5060	▪ **Problem:** Promina and Multiplexer devices need to interface with the newly developed Global Voice Manager ▪ **Recommendation:** The current Prominas and Muxes have their own mechanism to keep track of call duration. There will be no difference in performance and the problem will be addressed in JCSS 8.0	JCSS	2
12	5403	▪ **Problem:** CP Optimization does not seem to work correctly on H.323 scenarios ▪ **Recommendation:** Recommend user make use of DES instead of CP to optimize H.323	JCSS	2
13	5659	▪ **Problem:** TCP IERs take a lot of memory when a source to destination path doesn't exist ▪ **Recommendation:** Recommend user use UDP IERs where ever possible	JCSS	2
14	5677	▪ **Problem:** Capacity Planner Results not consistent when using multiple steps ▪ **Recommendation:** Recommend user run each STEP individually	JCSS	2
15	5685	▪ **Problem:** Software expectations after importing via DCI and running CP ▪ **Recommendation:** Problem will be addressed in future releases of the software	CORE	2

5. TROUBLESHOOTING

The following pieces of information are suggestions and practices for troubleshooting problems with JCSS. Please review the following before sending in a problem report.

5.1 Definitions

The following section contains the definitions for error messages that are sometimes seen in JCSS.

- **Stack imbalance**: This is a memory-related error. As memory is allocated and de-allocated during the hierarchical calling of computer functions, this memory is added to and removed from the stack in a last-in/first-out basis. Therefore, the contents of memory on the stack should always be in sync with the nesting level of the code being called. When it is not, this results in a stack imbalance. This can be due to other memory problems, such as memory allocation failures, or in some cases, programming errors. Ensuring you have sufficient memory on your computer to run the scenario can usually reduce these errors.

- **Program abort**: This is the general-purpose term for a program "crash." It can be due to any one of a number of reasons; one of the most common reasons is when memory is handled incorrectly (such as inserting an element into a list that has not been initialized) and the OPNET kernel traps that error.

- **Memory allocation failure**: This is an error that occurs when JCSS cannot obtain more memory to create space to hold additional information. This could be due to a lack of available memory on the machine or a conflict in JCSS whereby it is trying to re-use memory that is already in use by another part of the program.

5.2 Submitting Error Log files

To help the developers pinpoint the cause of various errors (especially those defined in the section above), it would be beneficial to submit your error log files along with your trouble reports.

The Error Log file is named "err_log" and is located in
<drive>:\JCSS\Scenario_Builder\op_admin

The err_log file keeps a record of all the errors encountered in JCSS. This file can grow very large over time. If the error you have found is repeatable, you can close JCSS, delete the err_log (or rename it to save it), then run JCSS and repeat your error. At this point, the err_log file will have the error you are reporting, without all the other items from previous runs. This will help reduce the clutter when you send in the err_log file (make the e-mail smaller), and give the developers a more focused look as to what the problem is. When you submit your Trouble Report (see *JCSS Help Desk and Problem*

Reporting), mention that you have the corresponding err_log file along with any other information you can provide.

If you experience a program abort (crash), an exception zip file should be created <drive>:\JCSS\Scenario_Builder\op_admin. Please include this zip file with your trouble report submittal.

6. JCSS HELP DESK AND PROBLEM REPORTING

The JCSS team is using a new, automated system for reporting problems or requesting assistance. Users no longer need to fill out a paper Trouble Report Form.
There are several ways to report a problem or request assistance:

1. You can e-mail your request / problem to netwars@opnet.com. Your e-mail will be logged into the JCSS Technical Support Tracking System.
2. You can call: (240) 497-3313, extension 2699. The voice mail is checked at least once a day.

All two of these methods will result in your case being entered into the JCSS Technical Support Tracking System. Upon review, the case will be assigned to a tech support engineer who will contact you for more information, or with possible solutions.

7. ACRONYMS

CCSD	Command Communications Service Designator.
DII/COE	Defense Information Infrastructure/ Common Operating Environment
DISA	Defense Information Systems Agency
IER	Information exchange requirement. An IER identifies each unique communication exchange that would normally take place during the successful accomplishment of each task that an organization could be assigned to accomplish
IER Priority	The IER priority options are Flash, Immediate, Priority, and Routine
IER Types	The IER types are Voice, Data, and Video
JMTK	Joint Mapping ToolKit, the standard mapping interface used on the GCCS. This software developed by NIMA and DISA contains a variety of applications and NIMA maps data
LOS	Line of Sight
MOE	Measure of effectiveness, a quantifiable metric that expresses the effectiveness of a system or concept under test. An MOE can also be defined as an algorithm that uses data to be collected to compute a quantity called the measure
MOP	Measure of performance, a quantitative or qualitative measure of a system's capabilities or characteristics
MSVC++	Microsoft Visual C++
NETWARS	Network Warfare Simulation
JCSS	Joint Communications Simulation System
OPFAC	Operational facility, a communications node that comprises one or more types of communications devices or systems. These devices may be military or may be commercial systems used (owned or leased) by military components or agencies. OPFACs comprise system elements
SDF	Simulation Description File
SRB	Software Release Bulletin
TMM	Terrain Mapping Module
V&V	Verification and Validation
WIPT	Working Integration Process Team