
JCSS Interface Control Document

7.0

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Disclaimer: As of October 2007, NETWARS was redesignated 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 File Formats for Statistics Collection

The SCM statistics APIs should be used to initialize the statistic files and write values to them. This will synchronize the stats between all devices in the simulation.

1.1 IER statistics (text file based)

The text files used for writing statistic information have the following naming convention -- <scenario_name>.ier_fail, <scenario_name>.ier_sent, etc. The first row in each file is the heading row. It has the names of all the fields, separated by tabs. All subsequent rows contain the information about IERs. All fields are written out as tab-separated values¹.

1.1.1 <scenario_name>.ier_sent

Field name	Description
IER_ID	A unique identifier for each IER (integer)
Th_ID	A unique identifier for each thread (integer)
IER_Src_Pf	The OPFAC that generates this IER
IER_Dest_Pf	The OPFAC that acts as the consumer for this IER
IER_Type	Specifies the traffic type -- voice, data
IER_Class	Specifies the security classification – secret, confidential, etc
IER_Size	Specifies the size of the IER. Number of bytes for data IERs and duration (in seconds) for voice IERs.
IER_Start	Time at which IER transmission was first attempted
IER_Sent	Time at which IER was actually transmitted
SE_Over	Name of the consumer end-system device
Blocks	Number of times the IER was blocked before transmission
IER_Priority	Specifies the precedence – routine, immediate, etc

1.1.2 <scenario_name>.ier_rcvd

Field name	Description
IER_ID	A unique identifier for each IER (integer)
IER_Src_Pf	The OPFAC that generates this IER
IER_Dest_Pf	The OPFAC that acts as the consumer for this IER
IER_Type	Specifies the traffic type -- voice, data
IER_Start	Time at which IER transmission was first attempted
IER_Rcvd	Time at which IER was received
Th_ID	A unique identifier for each thread (integer)
IER_Class (security classification)	Specifies the security classification – secret, confidential, etc

¹ Appendix L (*NETWARS Simulation API and Helper Functions*) of the Model Development Guide lists functions available to initialize and write IER statistics text.

IER_Perish	IER perishability
IER_Priority	Specifies the precedence – routine, immediate, etc
IER_Desc	Description of this IER
IER_Size	Specifies the size of the IER. Number of bytes for data IERs and duration (in seconds) for voice IERs.

1.1.3 <scenario_name>.ier_block

Field name	Description
IER_ID	A unique identifier for each IER (integer)
Th_ID	A unique identifier for each thread (integer)
IER_Src_Pf	The OPFAC that generates this IER
IER_Type	Specifies the traffic type -- voice, data
IER_Start	Time at which IER transmission was first attempted
Block_Time	Time at which the IER blocked
Block_Reason	Reason for IER blocking

1.1.4 <scenario_name>.ier_fail

Field name	Description
IER_ID	A unique identifier for each IER (integer)
Th_ID	A unique identifier for each thread (integer)
IER_Src_Pf	The OPFAC that generates this IER
IER_Dest_Pf	The OPFAC that acts as the consumer for this IER
IER_Type	Specifies the traffic type -- voice, data
IER_Start	Time at which IER transmission was first attempted
Fail_time	Time at which the IER failed
Fail_Reason	Reason for IER failure

1.1.5 <scenario_name>.th_sent

Field name	Description
Thd_ID	A unique identifier for each thread (integer)
Thd_Instance	Instance number of the thread firing
Src_platform	The OPFAC that generates this thread
Rxn_Criticality	Information whether the reaction IER is critical or not
Rxn_IER_ID	IER ID for the reaction IER
Rxn_Start	Time when the reaction IER is fired
Thd_Start_Time	Time at which thread transmission was started
Thd_Stop_Time	Time at which the thread transmission stopped.
Thd_Distribution	Distribution for the thread inter-arrivals
Thd_Interarrival	Inter-arrival times for the threads

1.1.6 <scenario_name>.th_rcvd

Field name	Description
Thd_ID	A unique identifier for each thread (integer)
Thd_Instance	Particular instance firing of the thread

Src_platform	The OPFAC that generates this thread
Dest_platform	The OPFAC that acts as the consumer for this thread
Rxn_Criticality	Information whether the reaction IER is critical or not
Rxn_IER_ID	The IER ID of the reaction IER
Thd_Start	Time at which thread transmission was first attempted
Thd_End	Time at which thread transmission was received at destination

1.1.7 <scenario_name>.th_fail

Field name	Description
Th_ID	A unique identifier for each thread (integer)
Th_Start	Time at which thread transmission was first attempted
Th_Fail	Time at which thread transmission was determined to have failed
Th_Src_Pf	The OPFAC that generates this thread
Th_Fail_Pf	The OPFAC that acts as the consumer for this thread
Fail_IER_ID	The ID of the thread segment at which the thread failed
Fail_time	Time at which the thread failed
Fail_Reason	Reason for thread failure

1.2 OV-Based Statistics

Output Vector (OV) is an OPNET proprietary format used for displaying results. The networking devices in NETWARS use standard OPNET statistics, created through the op_stat_*() kernel procedures. Any node level statistic can be probed from the Scenario Builder. Model developers who wish to collect node level statistics should promote the statistic to the node level and choose the statistic when creating the scenario. Standard NETWARS OE models also collect the IER statistics in the OV format.

The simulation models should write out the statistic values into the OV file – which can be post processed by the tool to generate VEC (vector) text files.

For integration with the HLA environment, calls to the op_stat_*() kernel procedures should be changed to the equivalent nw_stat_*() API functions.

1.2.1 Vector file format

The post processing converts the OV based statistics (OV files) into vector files (*.vec) for processing by the Analysis Tool. The vector files are named as <scenario_name>_statistic_.vec and have the following format:

```
Vector <number>
Name: <scenario_name>/<link or node name> <statistic name>
Number of Samples <number say n>
<Time> <Value>
<Time n> <Value n>
```

2 Generic Data File Formats

General Data Files (GDF) are used in NETWARS for information that is needed by the scenario builder either for set of default values (e.g. set of values for particular link type, default set of mission analysis questions, etc.) or for the information needed to retrieve the earlier software state information (e.g. who logged in? what were the prior projects opened etc?).

There are two main locations where the GDF files are stored in the NETWARS filesystem. First location is <NETWARS_Install_Dir>\Scenario_Builder\<OPNET version>\netwars\rules and the other one is <NETWARS_Install_Dir>\User_Data\rules. The first location has the set of files that come with the installation of the software and can be considered as standard set of GDF files. The other set of files are the files that are either created on fly during the software use or the files that are copied from the first location based on the user customization.

For example, a user modified the default value of link attributes, this will modify the contents LinkTypeMap.gdf file located in the <NETWARS_Install_Dir>\Scenario_Builder\<OPNET version>\netwars\rules and copy it to the User_Data\Rules folder, keeping the copy under the netwars\rules folder intact.

2.1 Decision Codes (*decision_codes.cfg*)

This file stores the default decision table entries used to populate the decision table in the Scenario Builder.

The format of this file and sample entries are as follows:

```
<Classification>;<Traffic Type>;<Num Sees>;<Dev1>;<Dev1Class>;...<DevN>;<DevNClass>

UNCLASSIFIED;VOICE;4;PHONE;UNCLASSIFIED;PHONE;SECRET;PHONE;TOP SECRET;RADIO;*
SECRET;VOICE;3;RADIO;*;PHONE;SECRET;PHONE;TOP SECRET
TOP SECRET;VOICE;1;PHONE;TOP SECRET
UNCLASSIFIED;DATA;6;COMPUTER;UNCLASSIFIED;COMPUTER;SECRET;COMPUTER;TOP
SECRET;JTIDS;UNCLASSIFIED;JTIDS;SECRET;JTIDS;TOP SECRET
SECRET;DATA;4;COMPUTER;SECRET;COMPUTER;TOP SECRET;JTIDS;SECRET;JTIDS;TOP SECRET
TOP SECRET;DATA;2;COMPUTER;TOP SECRET;JTIDS;TOP SECRET
```

Note: * is used to allow all device classifications.

2.2 Priority Codes (*priority_codes.cfg*)

This file contains default priority table entries used to populate the priority table in the Scenario Builder.

The format of this file and sample entries are as follows:

```
<Classification>;<Retry Interval>; <Number of Retries>

ROUTINE;300;2
PRIORITY;60;4
IMMEDIATE;20;6
FLASH;5;12
FLASH OVERRIDE;2;30
```

2.3 Link Types (*LinktypeMap.gdf*)

This file contains information about all the types of links currently supported for the inter-OPFAC links. For each type of the link its corresponding OPNET link model, its data rate, packet formats supported, classification, forward and reverse bandwidth, classification, probe to be created and other information is included.

The LinktypeMap.gdf file is used by the scenario builder to:

- Populate the defaults for the Link Attribute table based when a link is created.
- Verify the link connection between the OPFACs.

Following is the format of the file and few sample entries for this file:

```
# Format:
#
# NETWARS Linktype: Basic Linktype: model name: data packet format, data packet
  format,...:
# voice packet format, voice packet format...:classification:forward
  bandwidth:reverse bandwidth:
# frequency:number of voice channels:channel size for voice:throughput probe:
# channel mop probe:capacity,capacity,...

eplrs_ptp:radio:EPLRS_PTP:ip_dgram_v4:none:SECRET:120000.00:120000.00:420000.00:0:1
  6000.00:"Don't Include":120000.000000
100BaseT:wire:100BaseT:ethernet_v2:none:UNCLASSIFIED:100000000.00:100000000.00:0.00
  :0:16000.00:"Don't Include":100000000.000000
10BaseT:wire:10BaseT:ethernet_v2:none:UNCLASSIFIED:10000000.00:10000000.00:0.00:0:1
  6000.00:"Don't Include":10000000.000000
ATM_SONET_OC1:wire:ATM_SONET_OC1:ams_atm_cell:ams_atm_cell:UNCLASSIFIED:49536000.00
  :49536000.00:0.00:0:16000.00:"Don't
  Include":148608000.000000,594432000.000000,1188864000.000000,2377728000.000000
0
```

2.4 Broadcast Network Types (*net_configs*)

This file contains information about all the types of broadcast network currently supported by Scenario Builder. For each type of network, it specifies default Classification, bandwidth, frequency, and Utilization probe inclusion flag values.

Following is the format and few sample entries for this file:

```
# Network Type; Classification; Bandwidth; Frequency; Utilization Probe;
# Comma separated list of possible capacities;
# Comma separated list of data packet formats;
# Comma separated list of voice packet formats

sincgars;CONFIDENTIAL;96000;30000;"Include";4000,10000,20000,60000;radio_packet;rad
  io_packet
hf_radio;UNKNOWN;16000;3000;"Don't
  Include";10000,20000,40000;radio_packet;radio_packet
vhf_radio;UNCLASSIFIED;16000;35000;"Include";1000,5000,10000,20000;radio_packet;rad
  io_packet
uhf_radio;TOP SECRET;16000;225000;"Don't
  Include";1000,4000,10000,40000;radio_packet;radio_packet
link_16;SECRET;238000;960000;"Include";4000,6000,12000,25000;jtids_pk;all
  formatted,unformatted
havequick;CONFIDENTIAL;16000;120000;"Don't
  Include";3000,4000,10000,20000;havequick_packet;havequick_packet
```

```
eplrs_brdcst_0;UNCLASSIFIED;120000;45;"Include";1000,5000,20000,40000,80000;eplrs_p
  acket_0;eplrs_packet_0
eplrs_brdcst_1;UNCLASSIFIED;120000;60;"Include";1000,5000,20000,40000,80000;eplrs_p
  acket_1;eplrs_packet_1
```

2.5 IER Defaults (ier_configs)

This file is used to provide the default values for the IER. For each traffic type the traffic classification, perishability, traffic priority, type of the equipment to be used and IER details like distribution type, distribution mean, start and stop times, and average size of the IER is included.

The file format and sample entries are below:

```
# Traffic Type; Classification; Perishability; Priority; Avg. Size; Equipment;
# Distribution Type; Distribution Mean; Start Time; Stop Time

VOICE;UNCLASSIFIED;100.000000;IMMEDIATE;4;RADIO;UNIFORM;15.000000; 0; END
DATA;UNCLASSIFIED;500.000000;ROUTINE;1024;COMPUTER;CONSTANT;130.000000; 100; END
```

2.6 Requirement Matrix (ReqMatrix.gdf)

This is a tab-delimited text file describes the default Requirements Matrix questions. This file is divided according to the five functional areas (Voice, Data, VTC, Message, and Digital)

Within each functional area, each line defines a requirements matrix question and has the format shown below.

- Service is the underlying technical capability that the question is asking about. May be left blank
- Applications field is a comma-separated list of applications that run under the technology. May be left blank.
- Service must specified if Applications is specified

Some sample entries of this file are as follows:

```
# Question Service      Applications

Voice
How many tactical phone users? Tactical
How many DSN users by precedence and access level? DSN
How many DRSN users?      DRSN
Is Commercial Access needed? How many lines/trunks?
Is Host Nation Telephone Access needed? How many lines/trunks?
How many cellular phones are needed? Cellular
How many pagers are needed? Pager
How many IMARSAT/Mobile Satellite Services (MSS)/Iridium users? MSS

Data
How many SIPRNET users? SIPRNET      Web,Email,ftp,Netmeeting,GCCS-COP,GCCS-
      I3,GCCS-TBMCS,GCCS-TMD,GCSS,ADOCCS,AFATDS,AMDWS
What are the required servers?
How many NIPRNET users? NIPRNET      Web,Email,ftp,Netmeeting
What are the required servers?
How many Coalition WAN (CWAN)users? CWAN  Web,Email,ftp,Netmeeting
What are the required servers?
How many JWICS users? JWICS  JDISS,Web,Email,ftp,Netmeeting
What are the required servers?
How many GBS suites? GBS
```


2.7 Mission Analysis (MissionAnalysis.gdf)

This is a tab-delimited text file describes the default Requirements Matrix questions. This file is divided according to the four functional areas (Situation, Execution, Admin & Logistics, and Command and Control).

Some sample entries of this file are as follows:

```

Situation
What is the geographic operational area?
What is the location of the JTF Headquarters?
Who is the potential adversary?
What are the threat's capabilities to conduct information warfare?
Does a joint force plan exist to counter this threat?
Who are the subordinate component and supporting forces?
Who are the participating coalition forces?
What are the command relationships?
Mission
What is the mission?
Execution
What is the CJTF's mission and vision?
If an exercise, will it be used to validate an existing war plan?
If a contingency, what plans currently exist to cover this situation?
Admin & Logistics
How will forces deploy and what is the deployment time line?
Are there any transport restrictions?
What logistics support is available?
Which airport and seaport are available to friendly forces?
Command & Control
Are there any planning constraints?
What are the JTF's C4I requirements?
What are the releasability requirements for multinational operations?
Are joint or multinational interoperability considerations involved?
    
```

2.8 Application Bandwidth Requirements (Bandwidth_Requirements.gdf)

This file contains the default bandwidth requirements and number of users for an Application (specified by the Application, Service and Functional Area).

The format for the file is tab delimited as follows:

```

# Application      Service      FunctionalArea      BwRequirements (Kbps)
      NumUsers
    
```

Some of the sample entries of this file are as follows:

```

# Voice FunctionalArea
Tactical Tactical Voice 10 1000
DSN DSN Voice 16 1000
DRSN DRSN Voice 16 1000
Cellular Cellular Voice 5 500
Pager Pager Voice 32 1000
MSS MSS Voice 32 500
# SIPRNET Service, Data FunctionalArea
Web SIPRNET Data 1000 10
Email SIPRNET Data 10 200
ftp SIPRNET Data 2000 3
Netmeeting SIPRNET Data 5 10
GCCS-COP SIPRNET Data 100 20
GCCS-I3 SIPRNET Data 2000 5
GCCS-TBMCS SIPRNET Data 150 10
    
```

```

GCCS-TMD SIPRNET Data 300 5
GCSS SIPRNET Data 400 10
ADOCCS SIPRNET Data 30 10
AFATDS SIPRNET Data 200 5
AMDWS SIPRNET Data 300 10
# NIPRNET Service, Data FunctionalArea
Web NIPRNET Data 1000 10
Email NIPRNET Data 10 200
ftp NIPRNET Data 300 20
Netmeeting NIPRNET Data 120 10
    
```

2.9 Application Conversion Defaults (ApplicationConversion.gdf)

This file is used to populate the defaults used for converting NETWARS applications to IERs.

The file format and the sample entries for this file are as follows:

```

FunctionalArea Service Application Classification TrafficType
EquipmentType Perishability Priority
Voice Tactical Tactical Voice SECRET Voice Phone 120 ROUTINE
Voice DSN DSN UNCLASSIFIED Voice Phone 180 ROUTINE
Voice DRSN DRSN SECRET Voice Phone 180 PRIORITY
Data SIPRNET Web SECRET Data Computer 120 ROUTINE
Data SIPRNET Email SECRET Data Computer 120 PRIORITY
Data SIPRNET ftp SECRET Data Computer 120 ROUTINE
Data SIPRNET NetMeeting SECRET Data Computer 300 ROUTINE
Data SIPRNET GCCS-COP SECRET Data Computer 15 IMMEDIATE
Data GBS GBS SECRET Data Computer 3600 ROUTINE
Message R-DIN R-DIN SECRET Data Computer 120 PRIORITY
Message Y-DIN Y-DIN TOP SECRET(SI) Data Computer 30 IMMEDIATE
Message DMS DMS UNCLAS UNCLASSIFIED Data Computer 300 ROUTINE
    
```

2.10 Precedence (Precedence.gdf)

This file is used to override the default precedence values in NETWARS. The default values are

- ROUTINE
- PRIORITY
- IMMEDIATE
- FLASH
- FLASH OVERRIDE
- NOT KNOWN
- NOT SPECIFIED

This file is not part of a standard NETWARS installation. If the user wants to override the default values, he creates this file and specifies the new values in this file. The value “NOT KNOWN” is added automatically to the user-specified list of values.

This file must be located in the <NETWARS Dir>\Scenario_Builder\9.1.A\netwars\rules or the <User_Data>\Rules folder. If the file is found in both folders, the one under <User_Data>\Rules overrides the other one. The format of this file is as follows:

```

<Precedence value1>
<Precedence value2>
    
```

```
<Precedence value3>
.
.
<Precedence valueN>
```

If the user overrides the default values using this file, he must also change the priority code values specified in the priority_codes.cfg file (refer to Priority Codes section above).

Note: The default values are converted by the underlying NETWARS models during simulation to the appropriate Quality of Service information. Currently no model support is provided in the NETWARS standard models to do the same for the user-specified values. This functionality may be provided in the future releases of the software.

2.11 JNMS_Model_Names.gdf

This file contains lines of pairs of names separated by tabs. The first column is the NETWARS model type, used internally by NETWARS. The second column is the JNMS name, which may contain invalid characters (according to NETWARS) such as ampersands, slashes, or parentheses (/&). This file is used to give JNMS the appearance of their standard device names in XML files.

2.12 name_replace_attrs_list.gdf

The file is divided to 2 sections identified by the keyword "NODE:" and "LINK:". The section following the keyword NODE: represents the attributes on devices that need to perform name update when an unit/device is changed. The section following the keyword LINK: represents the attributes on devices that need to perform name update when an external/internal/radio link is changed.

Each line in the section is tab delimited into 3 columns. The first column is a required field that represents the attribute name. If the attribute name is a compound attribute, a "@" delimiter should immediately follows the compound attribute and follow by the child attribute name. The compound attribute can be a nested compound attribute as long as the "@" delimiter is inserted right after the compound attribute. The second column represents the model of the device that the attribute name appears in and the third column represents the delimiter that is expected for the attribute value. Both the second and third columns are optional.

File format and sample entries for this file is as follows:

```
NODE:
Portmap configuration@End node (1)    pro_portmap_utility
Portmap configuration@End node (2)    pro_portmap_utility
Selected path@Path                    pro_portmap_utility ,
Data_Circuits@End node (1)           MSE_Data_Circuit_Config
Data_Circuits@End node (2)           MSE_Data_Circuit_Config
Portmap configuration@End node (1)    multiplexer_utility
Protmap configuration@End node (2)    multiplexer_utility
SPVX Configuration@Source              CellXpress_PVC_Config
SPVX Configuration@Destination        CellXpress_PVC_Config
Preferred DTL Configuration.Route Configuration@Node Name ATM_SPVX_Config
Node Failure/Recovery Specification@Name      Failure Recovery
Link Failure/Recovery Specification@Name      Failure Recovery
VPN Configuration@Tunnel Source Name IP_VPN_Config
VPN Configuraiton@Tunnel Destination Name    IP_VPN_Config
VPN Configuration@Remote Client List@Client Node Name    IP_VPN_Config
```

PNNI Overload Configuration@Node Name PNNI Overload
RSVP Profiles@Reservation Parameters.Sender List.Sender QoS Attribute Config
RSVP Profiles@Retry Policy.Reservation Parameters.Sender List.Sender QoS Attribute
Config
Broadcast Network Configuration@Name Wireless_Configuration
Wireless Link Configuration@Name Wireless_Configuration
Home Satellite
Application: Destination Preferences@Actual Name@Name

LINK:
Wireless Link Configuration@Name Wireless_Configuration
Link Failure/Recovery Specification@Name Failure Recovery

3 Simulation Related Files

The following table lists the files that are created/used per scenario during a NETWARS simulation run.

Name	Format	Location	Remarks
<project_name>-<scenario_name>.ef	Text	\\User_Data\Projects\<Project_Name>\<Scenario_Name>	This is the environment file that is created when a simulation is run.
<project_name>-<scenario_name>.log	Text	\\User_Data\Projects\<Project_Name>\<Scenario_Name>	This is the simulation log file that logs information from a DES run.
<project_name>-<scenario_name>.seq	Binary	\\User_Data\Projects\<Project_Name>\<Scenario_Name>	This is the simulation sequence file that contains information about components of a simulation.
<project_name>-<scenario_name>.pb.m	Binary	\\User_Data\Projects\<Project_Name>\<Scenario_Name>	This file stores the probe (statistics) information for a simulation run.
<project_name>-<scenario_name>.nt.m	Binary	\\User_Data\Projects\<Project_Name>\<Scenario_Name>	This is the network model file that represents the scenario that will be used for the simulation.
<project_name>-<scenario_name>.*.i0.nt.exp,dll, lib, pdb	Binary	\\User_Data\Projects\<Project_Name>\<Scenario_Name>	These files represent the simulation shared object that is created during a simulation run.

4 Attribute Specification Files

Attribute Specification files are simple text files (.txt) used in NETWARS for storing object attributes. They follow the format described in the File Package (section 2) of the Opnet Development Kit's Generic Runtime System API Reference:

Within the File package are a number of `prg_file_parse` functions, which are used to parse ASCII configuration files of the form:

```
start_<block name1>
key1:value1
key2:value2
...
end_<block_name1>
start_<block name2>
...
end_<block_name2>
```

These types of files are often used to store user preferences, and the `prg_file_parse...` functions provide routines to read and deconstruct these types of files. In general terms, the file is considered to contain a collection of named blocks (the name follows the `start_` and `end_` prefixes) and each block contains a set of entries. Each entry is of the form:

```
<key> : <value>
```

None of these files are required in order to run NETWARS; instead, they are provided as a convenient way for the user to save object attributes in a human-readable format. Such files can be stored anywhere in the file system.

The attributes of one or more objects (OPFACs, links, etc) may be exported to a text file by selecting the objects and choosing *Topology > Export > Attributes for Selected Objects* from the Scenario Builder menu. The feature will prompt the user to enter a file name. Similarly, the attributes of all the objects in a scenario may be exported by choosing *Topology > Export > Attributes for All Objects*.

The generated text file will have the following format:

```
start_<object type>_std_attrs
hname:<object's hierarchical name>
...
<additional attributes will be specified here>
...
end_<object type>_std_attrs
```

Note that this file will not contain any Failure Recovery or Capacity Planning attributes for any objects. Furthermore, it will not contain the model attribute for any objects.

5 Link Specification Files

Link specification files are simple text files (.txt) used in NETWARS for automatically creating links in a scenario. The files follow a tab-delimited format, detailed below, in which each line specifies a set of values necessary to create one link. A link specification file may be imported into a scenario by choosing *Topology > Import > Link Specification* from the Scenario Builder menu. The feature will prompt the user to choose a file.

Each line of a link specification file must contain seven fields containing the following data in the given order. One tab character is required between fields for separation. Specific values are required in the first two fields, but the remaining fields may have the value “AUTO”. When “AUTO” is specified for a field, the import feature will choose a default value for that field.

1. Full hierarchal name of device A
2. Full hierarchal name of device B
3. Link technology
4. Link type
5. Name of the port to be used for device A
6. Name of the port to be used for device B
7. Link bandwidth (in kbps)

Below are example lines that specify a variety of links between two devices. A complete example link specification file, named LinkImport.gdf, can be found in the NETWARS\Scenario_Builder\<release>\netwars\rules directory.

```
Nw_Top.src.cisco4500 Nw_Top.dest.cisco4500 serial T1 pt_3 pt_5 1544
Nw_Top.src.cisco4500 Nw_Top.dest.cisco4500 AUTO AUTO AUTO AUTO AUTO
Nw_Top.src.cisco4500 Nw_Top.dest.cisco4500 AUTO 10BaseT AUTO AUTO AUTO
Nw_Top.src.cisco4500 Nw_Top.dest.cisco4500 ethernet AUTO AUTO AUTO AUTO
Nw_Top.src.cisco4500 Nw_Top.dest.cisco4500 AUTO AUTO eth_tx_0 eth_tx_1 AUTO
```

6 NETWARS Library Additions

6.1 Naming Conventions

The naming conventions for the five data types, Organizations, OPFACs, IERs, Communication Device Models and Scenarios, is described in the following five sections. These naming conventions will provide configuration management and users with additional trace-ability of the original data source.

6.1.1 Organizations Naming Convention

Organizations should be named as *<Service>_<Organization Name>_<Organization Function>*. *Organization Function* can also be communication function or military function. CENTCOM_ARFOR_CU, CENTCOM_ARFOR_HQ are two examples of organizations following this naming convention.

6.1.2 OPFACs Naming Convention

OPFACs should be named as *<Organization Function>_<OPFAC Function>_[Device Description]*, where *Device Description* is optional. CU_SATCOM, CU_TX_PROMINA, HQ_ATM_CLOUD are three examples of OPFACs that follow this naming convention.

6.1.3 IERs Naming Convention

The *Description* field of the IER should be utilized to provide traceability. The IER table dialog box of a unit will need to add this field to the table. Examples are COP UPDATE, Situation Awareness.

6.1.4 Device Models Naming Convention

Device Models should be named as *<Organization>_<Date>_<Vendor>_<Config>_<Version>*. An example device model is SPAWARCHS_20030801_CISCO_2510_v1.

6.1.5 Scenarios Naming Convention

Projects should be named as *<Name of Operation>* and scenarios (time phases/course of actions) should be named as *<Scenario Excursion>*. In NETWARS, a project can contain more than one scenario/phase. An example of a NETWARS project and three scenarios is project name Operation_Iraqi_Freedom and scenarios are Baseline, Network_Enhancement, New_Application.

6.1.6 Organization and OPFAC Templates

In addition to the preceding naming conventions, the software will provide additional name scoping for the models produced via template OPFACs and organizations. On disk, an OPFAC is stored as: *opfac_<OPFAC type>.nd.m* (2004-1) and *opfac_<OPFAC type>.nt.m* (2004-2). On disk, an organization will be stored as: *org_<Org Name>.nd.m* (2004-1) and *org_<Org Name>.nt.m* (2004-2). These prefixes make it possible to distinguish between OPFACs,

organizations, scenarios, and device models by file name alone. In general, NETWARS users will not need to know these details, but they help to ensure system stability.

6.2 IER Message Field

The IER Message field provides a mechanism for model developers to allow users to trigger special behavior for IERs during simulation. The user may specify an arbitrary value in the IER Message field in the Scenario Builder. That Message value will be exported to the `ier/messageType` element in the Scenario XML file. During simulation, models may access the Message value and perform special actions depending on that value.

7 IER Database Schema

The 2003-2 schema of the database is detailed below in tabular form, preceded by notes on particular features of the schema. The database schema is based on the 7 April 2003 version of the All_CADM Report².

7.1 *Format of the Tables*

The section heading that precedes each table below gives the name of the database table as specified by the CADM and notes the name of the equivalent CADM entity. Similarly, each column is labeled with both the CADM column name and the equivalent CADM attribute name. The final entry for each database column notes the equivalent database column in prior versions of the NETWARS IER database.

Each database table corresponds to exactly one CADM table, and each CADM-compliant column is included in the specified database table (i.e. no column has been relocated to an alternate table). Non-CADM columns have been assigned to appropriate database tables, based on the perceived function of that table.

Datatypes, units, and value ranges for CADM-compliant columns are drawn directly from the CADM specification. Likewise, all primary key designations are identical to those specified by CADM, although some foreign key designations were unnecessary in this database schema and were omitted.

7.2 *Non-CADM Fields*

A few columns in the new database schema did not have equivalent attributes in the CADM. They will be considered for submission to be added to the CADM in future.

- **security_classification**: This column specifies the security classification of the IER, which influences which devices may fire the IER. After discussion in the NETWARS community, the definition of the CADM attribute SECURITY-CLASSIFICATION CODE was judged to contain classification values that are not appropriate for use in NETWARS, so that attribute is not used.
- **interarrival_distribution_rule**: This column specifies the distribution function to be applied to the mean inter-arrival time when firing IER messages. Although the inter-arrival time has analogous CADM attributes, no distribution functions are defined.
- **equipment_type**: This column specifies the type of equipment that may carry the IER. The current use of this data in NETWARS includes a diverse set of equipment types, not currently represented in a single CADM attribute.
- **sim_start_time** and **sim_stop_time**: These columns specify the simulation time at which an IER may start and stop firing. The CADM has equivalent columns for calendar times, but does not yet recognize the abstract simulation times used by NETWARS.

² Institute for Defense Analysis is responsible for generating all the CADM specifications. More information about this document can be retrieved from <http://www.ida.org/>.

7.3 Table Details

7.3.1 Table IER (INFORMATION-EXCHANGE-REQUIREMENT)

Column Name	CADM Attribute	DomNm	Datatype	Units/Value Range	Null able	PK	FK	FK Reference	Note	Equivalent Existing NETWARS Attribute
INFOEXCREQ_GUID_ID	Information Exchange Requirement GUIDANCE IDENTIFIER	INT20	numeric(20)		Not Null	PK				ier.code
security_classification		String	varchar(50)		Null				The range of values for the CAMD attribute SECURITY-CLASSIFICATION CODE was considered inappropriate for use in NETWARS.	ier.classification_code
IER_FREQ_QY	INFORMATION-EXCHANGE-REQUIREMENT FREQUENCY QUANTITY	Number	numeric		Null					ier.frequency_rate
IER_TM_PER_CD	INFORMATION-EXCHANGE-REQUIREMENT FREQUENCY TIME PERIOD CODE	INT1	numeric(2)	01=ONE SECOND; 02=ONE MINUTE; 03=ONE HOUR; 04=ONE DAY; 05=ONE WEEK; ...	Null					ier.frequency_rate

IER_MX_TRAN_ELT_QY	INFORMATI ON- EXCHANGE- REQUIREME NT MAXIMUM TRANSIT ELAPSED- TIME QUANTITY	Number_R eal	numeric	seconds	Null				Contrast with INFORMAT ION- EXCHANG E- REQUIREM ENT MAXIMUM USEFUL ELAPSED- TIME QUANTITY	ier.perishability_code
IER_VOCVID_ELT_QY	INFORMATI ON- EXCHANGE- REQUIREME NT METHOD VOICE- VIDEO ELAPSED- TIME QUANTITY	Number_R eal	numeric	seconds	Null					ier.product_size
IER_MSN_PHASE_TX	INFORMATI ON- EXCHANGE- REQUIREME NT MISSION PHASE DESCRIPTIO N TEXT	String	varchar(2000)		Null					ier.description
IER_PRCDNCE_CD	INFORMATI ON- EXCHANGE- REQUIREME NT PRECEDENC E CODE	String	char(1)	N=NOT SPECIFIED; O=IMMEDIATE; P=PRIORITY; R=ROUTINE; X=NOT KNOWN; Y=FLASH OVERRIDE; Z=FLASH	Null					ier.precedence_code
IER_PRD_DTSZ_QY	INFORMATI ON- EXCHANGE- REQUIREME NT PRODUCT	Number	numeric(19)	bits	Null					ier.product_size

	DATA SIZE QUANTITY										
interarrival_distribution_rule		String	char(2)	01=CONSTANT; 02=EXPONENTIAL; 03=UNIFORM; 04=ONCE	Null					Specifies the inter-arrival distribution to be used.	ier.distribution_rule
custom1		String	varchar(256)		Null					These are custom fields associated with the IER. They will not affect scenarios or simulations.	
custom2		String	varchar(256)		Null						
custom3		String	varchar(256)		Null						
custom4		String	varchar(256)		Null						
custom5		String	varchar(256)		Null						

7.3.2 Table IER_ELEMENT (INFORMATION-EXCHANGE-REQUIREMENT-ELEMENT)

Column Name	CADM Attribute	DomNm	Datatype	Units/ Value Range	Null able	PK	FK	FK Reference	Note	Equivalent Existing NETWARS Attribute
INFOEXCREQ_GUID_ID	Information Exchange Requirement GUIDANCE IDENTIFIER	INT20	numeric(20)		Not Null	PK				ier.code
CONS_ORGT_ID	Consumer ORGANIZATION-TYPE IDENTIFIER	INT20	numeric(20)		Null		FK	ORG_TY.ORG_TID		
PROD_ORGT_ID	Producer ORGANIZATION-TYPE IDENTIFIER	INT20	numeric(20)		Null		FK	ORG_TY.ORG_TID		
equipment_type		String	varchar(50)		Null				Specifies the type of equipment the IER may be transmitted	ier.equipment_type

									over. Stored in Rules\equipment.gdf	
sim_start_time		Number_Real	numeric	seconds	Null				The time during a simulation at which the IER becomes active.	
sim_stop_time		Number_Real	numeric	seconds	Null				The time during a simulation at which the IER becomes inactive.	

7.3.3 Table IER_ELEMENT_PROD (INFORMATION-EXCHANGE-REQUIREMENT-ELEMENT-PRODUCT)

Column Name	CADM Attribute	DomNm	Datatype	Units/Value Range	Nullable	PK	FK	FK Reference	Note	Equivalent Existing NETWARS Attribute
INFOEXCREQ_GUID_ID	Information Exchange Requirement GUIDANCE IDENTIFIER	INT20	numeric(20)		Not Null	PK				ier.code
EXRELT_CD	EXCHANGE-RELATIONSHIP-TYPE CODE	String	char(2)	00 = INTRA (WITHIN THE SAME UNIT); 0A = HIGHER TO LOWER IN CHAIN OF COMMAND; ...	Null		*	(* This field is a foreign key in CADM, but is not used as one in the NETWARS IER DB.)		ier.urc_code
DIT_ID	DATA-ITEM-TYPE IDENTIFIER	INT20	numeric(20)		Null		FK	DATA_ITEM_TYPE.DIT_ID		

7.3.4 Table ORG_TY (ORGANIZATION-TYPE)

Column Name	CADM Attribute	DomNm	Datatype	Units/Value Range	Nullable	PK	FK	FK Reference	Note	Equivalent Existing NETWARS Attribute
ORGT_ID	ORGANIZATION-TYPE IDENTIFIER	INT20	numeric(20)		Not Null	PK				
ORGT_ABBR_NM	ORGANIZATION-TYPE ABBREVIATED NAME	String	varchar(50)		Null					ier.producing_opfac_code; ier.consuming_opfac_code

7.3.5 Table DATA_ITEM_TYPE (DATA-ITEM-TYPE)

Column Name	CADM Attribute	DomNm	Datatype	Units/Value Range	Nullable	PK	FK	FK Reference	Note	Equivalent Existing NETWARS Attribute
DIT_ID	DATA-ITEM-TYPE IDENTIFIER	INT20	numeric(20)		Not Null	PK				
DIT_CLS_CD	DATA-ITEM-TYPE CLASS CODE	INT1	numeric(2)	01 = C--COURIER/MANUAL; 02 = F--FACSIMILE; 03 = A-DIGITAL ASCII DATA; 04 = B-DIGITAL BIT-ORIENTED DATA; 05 = I--IMAGE; 06 = T--TEXT ASCII; 07 = L--VIDEO LIVE; 08 = P--POSITION AND NAVIGATION; 09 = S--VIDEO STILL FRAME; 10 = V--VOICE; 98 = NOT SPECIFIED; 99 = NOT KNOWN	Null					ier.type

8 NETWARS XML Schema

8.1 Purpose of the NETWARS XML Schema

The NETWARS Extensible Markup Language (XML) Schema provides a detailed definition of all data that may be imported to or exported from the NETWARS Toolkit. By providing this definition, the schema helps create an interface between the Toolkit and other projects and individuals that want to share information with the Toolkit. The schema defines the data by specifying an exact format for XML documents. Any XML document matching this format will be accepted by the Toolkit, and conversely, any XML document created by the Toolkit will match the format. In this way, the schema ensures that data crossing the interface is understandable to both sides.

The vision of XML in NETWARS is to enable the Next Generation of NETWARS as a Web Service. NETWARS is to have a complete and stable XML schema for all input and output as an enabling technology for NETWARS Network Centric (NETCENTRIC) and Web Services. Web Services will be based on industry standards building upon XML: Simple Object Access Protocol (SOAP), Web Services Description Language (WSDL), Universal Description, Discovery & Integration (UDDI); plus perhaps Web Services Interoperability (WS-I) profiles and emerging standards in the area such as Web Service security and workflow control.

The introduction of the NETWARS XML Schema was prompted by several factors. Many users of NETWARS have extensive data collections that could be used to feed the construction of OPFACs, scenarios, etc. However, previously published NETWARS data formats, such as those in the Scenario Definition File (SDF) and Platform DEFinition (PDEF), are not fully documented and can be difficult to work with. In addition, these previous data formats are often used only for import or export of data, but not both. For example, SDFs are created by the Scenario Builder, but cannot be read by it.

The schema addresses each of these factors. The schema is designed to define fully the data that is relevant to the NETWARS Toolkit, providing users with a guide for pulling data from their existing data collections. At the same time, the schema identifies optional data and defines default values, allowing users to load partial data into the Toolkit without needing to produce unknown data. In addition, by providing detailed data definitions, which include data types and value restrictions, the schema itself is documentation for the data format. Additional documentation giving context to the data is also embedded in the schema document. Finally, both import and export of data defined by the schema is supported.

In addition, the schema has other benefits when compared with the previous formats. The schema defines a single, integrated format, encouraging greater consistency in the data definitions than is present in the separate SDF and PDEF formats. XML documents conforming to the schema are more verbose than the previous data formats, making them more understandable to human users. The use of XML also allows common XML tools to be applied to the data. XML editors and processors can be used by either the Toolkit or the user to manipulate the data before or after it is exchanged. One such use is "validation". A validation engine can automatically compare any XML document to the NETWARS schema to determine if it matches the specified format.

8.2 Implications for Developers

The introduction of the NETWARS XML Schema will initially affect developers who wish to load existing data collections into the NETWARS Toolkit. Model developers will also be affected by the eventual replacement of SDFs with XML documents.

Data loading via XML will be supported in the Toolkit. Its initial capabilities include the import and export of groups of OPFAC templates and of individual scenarios. A primary feature of the schema, with regard to data interoperability, is the continuing integration of the schema with the All DoD Core Architecture Data Model (ALL_CADM), which is currently used by many networking projects. The use of this data model helps establish a common set of elements between the NETWARS schema and other data sources that use the ALL_CADM, allowing the two to be interfaced more easily.

The replacement of the SDF by an XML document will not have a significant impact on the development of individual device models. The SDF is accessed only through an API defined in the simulation domain. This API will be modified to access the XML document but will still return data to the model that is consistent with its previous operation. Minor changes to the API will be made in concert with the conversion to XML.

8.3 Overview of the Schema

The NETWARS XML Schema uses the WWW Consortium Schema language to specify simple and complex data elements, as well as attributes modifying those elements. The primary elements defined in the schema correspond to the primary data objects used in the NETWARS Toolkit: scenarios, organizations, and OPFACs. Many smaller data elements are defined and can be used independently, such as IERs and threads. The complete schema and example XML documents specifying OPFACs are included as addendums to this document, since they are too large to include directly.

Each primary element is defined as a complex structure containing a number of other elements. The sub-elements may contain simple data, such as a string or number, or may be complex structures containing further elements. (Documentation of the schema is included as an appendix to this document, and includes illustrations showing the structure of the OPFAC and other elements.) The primary element, 'opfac', contains sub-elements, such as 'startTime' and 'stopTime'. The elements fall into two distinct categories, depending on the source of the data definition. Elements without a prefix or with the prefix 'nw' are custom elements defined by NETWARS. Elements with the prefix 'CADM' are defined in the schema produced as part of the ALL_CADM specification. (These prefixes are derived from the "namespace" of each schema.) The texts beneath many of the elements are additional documentation embedded in the schema that provides contextual information about the element or notes special features of the schema.

8.4 NETWARS XML Schema Changes

8.4.1 Changes made to the schema in 2007

The name, 'NETWARS_2007_2007_01_26.xsd', and namespace, 'http://www.netwars.disa.mil/2007/2007.01.26/NETWARS', of the XML schema was changed in NETWARS 2007.

The portList element for devices was removed and references to ports in other elements were changed from ID references to strings.

The definition of the satelliteLink/datarate element was corrected to specify its type as a numeric double.

8.4.2 Changes made to the schema in 2006-2

The name, 'NETWARS_2006_2_2006_09_05.xsd', and namespace, 'http://www.netwars.disa.mil/2006-2/2006.09.05/NETWARS', of the XML schema was changed in NETWARS 2006-2.

The optional ier/messageType element was added to the schema.

8.4.2.1 Wired links

The following changes were made to accommodate the combination of the external and internal link classes into a single wired link class in the Scenario Builder.

1. The internalLink element was removed.
2. The following elements were renamed:

Old Name	New Name
externalLink	wiredLink
scenario/externalLinkList	scenario/wiredLinkList
scenario/externalLinkList/externalLink	scenario/wiredLinkList/wiredLink
organization/externalLinkList	organization/wiredLinkList
organization/externalLinkList/externalLink	organization/wiredLinkList/wiredLink
opfac/internalLinkList	opfac/wiredLinkList
opfac/internalLinkList/internalLink	opfac/wiredLinkList/wiredLink

3. References to nw:internalLink and nw:externalLink were replaced with nw:wiredLink in the definitions of these keys:
 - a. keyGlobalIdsInScenarios
 - b. keyGlobalIdsInOrganizationTemplate
 - c. keyGlobalIdsInOpfacTemplate

4. The constraint uniqueExternalLinkEndpoints was renamed to uniqueWiredLinkEndpoints, and it now constrains only device references in the wiredLink, not unit and device references.

8.4.3 Changes made to the schema in 2006-1

Only minor changes were made to the XML schema in NETWARS 2006-1, and the schema file carries the same name, 'NETWARS_2005_2_2005_11_10.xsd', and namespace, 'http://www.netwars.disa.mil/2005-2/2005.11.10/NETWARS', as in NETWARS 2005-2.

The following elements were made optional in the 2006-1 release. Since each of these elements existed in the 2005-2 schema, any XML file that was valid for 2005-2 is also valid for 2006-1.

Element	Subelement
scenarioProperties	OPSITName
opfac	CADM:ORGT_NM
externalLink	classification
	bandwidth
	reverseBandwidth
	voiceChannelRate
	voiceChannelNumber
internalLink	datarate
radioLink	classification
	bandwidth
	voiceChannelRate
	voiceChannelNumber
satelliteTsspLink	classification
	aUplinkBandwidth
	aDownlinkBandwidth
	bUplinkBandwidth
	bDownlinkBandwidth
planningLink	classification
	forwardBandwidth
	reverseBandwidth

8.5 Current XML Schema

8.5.1 XML Schema Documentation

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

NETWARS is oriented around OPFACs, organizations, and scenarios. Valid documents include individual scenarios and lists of template OPFACs or template organizations, which may be batch-loaded into NETWARS. This schema is primarily composed of elements and data types supporting the three main documents. All NETWARS-specific elements and data types are placed in the main NETWARS namespace, which is abbreviated as "nw" in this document. No namespace is declared for the CADM elements in their own document, but within the NETWARS schema, all CADM elements have been coerced into a namespace. This CADM namespace is similar to the NETWARS namespace and is abbreviated as "CADM" in this document. Any element within the NETWARS schema that has the "CADM" prefix is identical to the CADM element defined by IDA. The 'key' and 'keyref' elements defined below in many elements enforce constraints on sub-elements that help ensure that those sub-elements correctly reference each other, but these constraints cannot absolutely ensure that the references are legal within the Scenario Builder. Also, note that the 'scenario', 'organization', and 'organizationTemplate' elements specify similar keys and references. If changes to the keys are needed in one of these elements, they are probably also needed in the others. (The elements cannot share the key definitions.)

8.5.1.1 (element)scenario

documentation This element specifies a single scenario, which contains units (OPFACs and organizations) along with physical and abstract associations between those units (links, networks, and relationships). It supports all data that is stored in the network model file that is produced by the Scenario Builder.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nilable false

8.5.1.2 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type definition ur-type definition
derivation method restriction
abstract false
attributes none
 (sequence)
content

- (element)[nw:scenarioProperties](#)

- (group)[nw:groupOrganizationContainment](#)
- (element){0,1} [flowList](#)
- (element){0,1} [connectionList](#)
- (element){0,1} [pathList](#)
- (element){0,1} [nw:ierList](#)
- (element){0,1} [nw:threadList](#)

8.5.1.3 (element)flowList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeFlowList](#)

8.5.1.4 (element)connectionList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeConnectionList](#)

8.5.1.5 (element)pathList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typePathList](#)

8.5.1.6 (element)scenarioProperties

documentation This element contains properties that affect the scenario as a whole. The properties may specify processing constraints or may contain data shared by the other elements of the scenario.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.7 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

- (element)[name](#)
 - (element){0,1} [OPSITName](#)
 - (element)[creation](#)
- content**
- (element){0,1} [documentation](#)
 - (element){0,1} [displayOptions](#)
 - (element){0,1} [ierImportOptions](#)
 - (element){0,1} [profileList](#)

8.5.1.8 (element)name

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.9 (element)OPSITName

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.10 (element)creation

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:dateTime

8.5.1.11 (element)documentation

documentation This element contains a manually-entered textual description of the scenario.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.12 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element){1,unbounded} [line](#)

8.5.1.13 (element)line

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.14 (element)displayOptions

documentation This element contains options controlling the display of objects.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.15 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element){0,1} [showRelationships](#)
- (element){0,1} [showLinks](#)
- (element){0,1} [showSatelliteLinks](#)
- (element){0,1} [showNetworks](#)

8.5.1.16 (element)showRelationships

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
abstract false
nillable false
default value true
type definition xs:boolean

8.5.1.17 (element)showLinks

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
abstract false
nillable false
default value true
type definition xs:boolean

8.5.1.18 (element)showSatelliteLinks

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
abstract false
nillable false
default value true
type definition xs:boolean

8.5.1.19 (element)showNetworks

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
abstract false
nillable false
default value true
type definition xs:boolean

8.5.1.20 (element)ierImportOptions

This element contains options controlling the import of IERs. Three IER sources are considered: databases, IER text files, and demand text files. Each source can be individually enabled, and the IERs that are retrieved from each source may be optionally pre-set to generate background traffic. Additionally, a specific database may be specified as an IER source. Finally, the use of implicit relationships and IERs may be enabled. Enabling implicit relationships may result in additional IERs being retrieved from databases and IER text files.

documentation

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
abstract false

nillable false

8.5.1.21 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

- (element){0,1} [useImplicit](#)

content

- (element){0,1} [text](#)

- (element){0,1} [database](#)

8.5.1.22 (element)useImplicit

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:boolean

8.5.1.23 (element)text

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeIerSourceOptions](#)

8.5.1.24 (element)database

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.25 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition [nw:typeIerSourceOptions](#)

derivation method extension

abstract false

attributes none

content as [nw:typeIerSourceOptions](#)plus

8.5.1.26 (element)selection

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.27 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none
(sequence)

content

- (element)[serverName](#)
- (element)[databaseName](#)

8.5.1.28 (element)serverName

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.29 (element)databaseName

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.30 (element)profileList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeProfileList](#)

8.5.1.31 (complex type)typeIerSourceOptions

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract	false
attributes	none (sequence)
content	<ul style="list-style-type: none"> • (element){0,1} import • (element){0,1} background

8.5.1.32 (element)import

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract	false
nillable	false
type definition	xs:boolean

8.5.1.33 (element)background

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract	false
nillable	false
type definition	xs:boolean

8.5.1.34 (element)organizationTemplateList

documentation This element contains a list of template organizations that may be loaded into the NETWARS Toolkit for use in constructing scenarios.

target namespace	http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract	false
nillable	false

8.5.1.35 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract	false
attributes	none (sequence)
content	<ul style="list-style-type: none"> • (element){0,unbounded} nw:organizationTemplate

8.5.1.36 (element)organizationTemplate

documentation This element defines a template organization element with constraints similar to

the constraints in the 'scenario' element. It is the "root" of the template organization and is only used as an immediate child of the 'organizationGroup' element.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

8.5.1.37 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

- (group)[nw:groupOrganizationData](#)
 - (element){0,1} [profileList](#)
 - (element){0,1} [attributeList](#)
 - (group)[nw:groupOrganizationContainment](#)
 - (element){0,1} [nw:ierList](#)
 - (element){0,1} [nw:threadList](#)
- content**

8.5.1.38 (element)profileList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeProfileList](#)

8.5.1.39 (element)attributeList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeAttributeList](#)

8.5.1.40 (element)organization

documentation This element defines an organization that is a sub-element of a scenario or

organization template. Most key constraints, such as those for association references, are global to the scenario or organization template, and so are not appropriate in this element.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

8.5.1.41 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type definition ur-type definition
derivation method restriction

abstract false

attributes

- [JNMSExport](#) = true

(sequence)

- (group)[nw:groupOrganizationData](#)
- (choice){0,1}
 - (element)[nw:unitLocation](#)
 - (element)[nw:trajectory](#)
- (element){0,1} [nw:JNMSData](#)
- (element){0,1} [attributeList](#)
- (group)[nw:groupOrganizationContainment](#)

content

8.5.1.42 (element)attributeList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeAttributeList](#)

documentation

This group is used by both the organization and organizationTemplate elements to avoid redundancy. It contains the data elements specific to organizations.

8.5.1.43 (element)orgModel

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false
type definition xs:string

8.5.1.44 (element)orgType

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition xs:string

8.5.1.45 (element)typeName

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition xs:string

8.5.1.46 (element)sourceRelationshipCode

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition xs:string

8.5.1.47 (element)echelonSize

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition xs:integer

8.5.1.48 (element)offset

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition xs:double

8.5.1.49 (element)tasks

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition [nw:typeUnitTasks](#)

documentation

This group is used by both the organization and scenario elements to avoid redundancy. It contains the elements that specify which other elements are contained within the organization or scenario.

8.5.1.50 (element)opfacList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.51 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element){1,unbounded} [nw:opfac](#)

8.5.1.52 (element)organizationList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.53 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element){1,unbounded} [nw:organization](#)

8.5.1.54 (element)wiredLinkList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.55 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element){1,unbounded} [nw:wiredLink](#)

8.5.1.56 (element)radioLinkList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.57 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element){1,unbounded} [nw:radioLink](#)

8.5.1.58 (element)satelliteTsspLinkList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.59 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element){1,unbounded} [nw:satelliteTsspLink](#)

8.5.1.60 (element)planningLinkList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.61 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element){1,unbounded} [nw:planningLink](#)

8.5.1.62 (element)broadcastNetworkList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.63 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element){1,unbounded} [nw:broadcastNetwork](#)

8.5.1.64 (element)satelliteLinkList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.65 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false
attributes none
 (sequence)
content

- (element){1,unbounded} [nw:satelliteLink](#)

8.5.1.66 (element)relationshipList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false
nillable false

8.5.1.67 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false
attributes none

(sequence)
content

- (element){1,unbounded} [nw:relationship](#)

8.5.1.68 (element)annotationList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false
nillable false

type definition [nw:typeAnnotationList](#)

8.5.1.69 (element)wiredLink

documentation This element describes a point-to-point link and includes references to the units that are the endpoints of the link.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

8.5.1.70 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

- abstract** false
- attributes**
 - [JNMSEExport](#) = true

(sequence)

 - (element)[id](#)
 - (element)[name](#)
 - (element)[model](#)
 - (element){0,1} [classification](#)
 - (element){0,1} [bandwidth](#)
 - (element){0,1} [reverseBandwidth](#)
- content**
 - (element){0,1} [voiceChannelRate](#)
 - (element){0,1} [voiceChannelNumber](#)
 - (element){0,1} [optimizationAttributes](#)
 - (element)[endpointA](#)
 - (element)[endpointB](#)
 - (element){0,1} [bendpointList](#)
 - (element){0,1} [attributeList](#)

8.5.1.71 (element)id

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeId](#)

8.5.1.72 (element)name

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.73 (element)model

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false
type definition xs:string

8.5.1.74 (element)classification

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition [nw:typeClassification](#)

8.5.1.75 (element)bandwidth

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition xs:double

8.5.1.76 (element)reverseBandwidth

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition xs:double

8.5.1.77 (element)voiceChannelRate

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition xs:double

8.5.1.78 (element)voiceChannelNumber

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition xs:nonNegativeInteger

8.5.1.79 (element)optimizationAttributes

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition [nw:typeOptimizationAttributes](#)

8.5.1.80 (element)endpointA

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeDeviceConnection](#)

8.5.1.81 (element)endpointB

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeDeviceConnection](#)

8.5.1.82 (element)bendpointList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeBendpointList](#)

8.5.1.83 (element)attributeList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeAttributeList](#)

8.5.1.84 (element)radioLink

documentation This element describes a radio link and includes references to the units that are the endpoints of the link.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.85 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

- attributes**
- [JNMSEExport](#) = true
- (sequence)
- (element)[id](#)
 - (element)[name](#)
 - (element)[model](#)
 - (element){0,1} [classification](#)
 - (element)[frequency](#)
 - (element){0,1} [bandwidth](#)
- content**
- (element){0,1} [voiceChannelRate](#)
 - (element){0,1} [voiceChannelNumber](#)
 - (element){0,1} [optimizationAttributes](#)
 - (element)[endpointA](#)
 - (element)[endpointB](#)
 - (element){0,1} [bendpointList](#)
 - (element){0,1} [attributeList](#)

8.5.1.86 (element)id

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeId](#)

8.5.1.87 (element)name

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.88 (element)model

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.89 (element)classification

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeClassification](#)

8.5.1.90 (element)frequency

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:double

8.5.1.91 (element)bandwidth

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:double

8.5.1.92 (element)voiceChannelRate

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:double

8.5.1.93 (element)voiceChannelNumber

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:nonNegativeInteger

8.5.1.94 (element)optimizationAttributes

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeOptimizationAttributes](#)

8.5.1.95 (element)endpointA

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeDeviceConnection](#)

8.5.1.96 (element)endpointB

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeDeviceConnection](#)

8.5.1.97 (element)bendpointList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeBendpointList](#)

8.5.1.98 (element)attributeList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeAttributeList](#)

8.5.1.99 (element)satelliteTsspLink

documentation This element describes a TSSP satellite link and includes references to the endpoint units of the link.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.100 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes

- [JNMSExport](#) = true

(sequence)

- (element)[id](#)
- (element)[name](#)
- (element)[model](#)
- (element){0,1} [classification](#)
- (element)[homeSatellite](#)
- (element)[aUplinkChannelIndex](#)
- (element)[aUplinkFrequency](#)
- (element)[aUplinkDataRate](#)
- (element){0,1} [aUplinkBandwidth](#)
- (element)[aDownlinkChannelIndex](#)
- (element)[aDownlinkFrequency](#)
- (element)[aDownlinkDataRate](#)

content

- (element){0,1} [aDownlinkBandwidth](#)
- (element)[bUplinkChannelIndex](#)
- (element)[bUplinkFrequency](#)
- (element)[bUplinkDataRate](#)
- (element){0,1} [bUplinkBandwidth](#)
- (element)[bDownlinkChannelIndex](#)
- (element)[bDownlinkFrequency](#)
- (element)[bDownlinkDataRate](#)
- (element){0,1} [bDownlinkBandwidth](#)
- (element){0,1} [optimizationAttributes](#)
- (element)[endpointA](#)
- (element)[endpointB](#)
- (element){0,1} [bendpointList](#)

- (element){0,1} [attributeList](#)

8.5.1.101 (element)id

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeId](#)

8.5.1.102 (element)name

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.103 (element)model

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.104 (element)classification

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeClassification](#)

8.5.1.105 (element)homeSatellite

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeDeviceConnection](#)

8.5.1.106 (element)aUplinkChannelIndex

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:integer

8.5.1.107 (element)aUplinkFrequency**target namespace** http://www.netwars.disa.mil/2007/2007.01.26/NETWARS**abstract** false**nillable** false**type definition** xs:double**8.5.1.108 (element)aUplinkDataRate****target namespace** http://www.netwars.disa.mil/2007/2007.01.26/NETWARS**abstract** false**nillable** false**type definition** xs:double**8.5.1.109 (element)aUplinkBandwidth****target namespace** http://www.netwars.disa.mil/2007/2007.01.26/NETWARS**abstract** false**nillable** false**type definition** xs:double**8.5.1.110 (element)aDownlinkChannelIndex****target namespace** http://www.netwars.disa.mil/2007/2007.01.26/NETWARS**abstract** false**nillable** false**type definition** xs:integer**8.5.1.111 (element)aDownlinkFrequency****target namespace** http://www.netwars.disa.mil/2007/2007.01.26/NETWARS**abstract** false**nillable** false**type definition** xs:double**8.5.1.112 (element)aDownlinkDataRate****target namespace** http://www.netwars.disa.mil/2007/2007.01.26/NETWARS**abstract** false**nillable** false**type definition** xs:double**8.5.1.113 (element)aDownlinkBandwidth****target namespace** http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false
nillable false
type definition xs:double

8.5.1.114 (element)bUplinkChannelIndex

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false
nillable false
type definition xs:integer

8.5.1.115 (element)bUplinkFrequency

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false
nillable false
type definition xs:double

8.5.1.116 (element)bUplinkDataRate

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false
nillable false
type definition xs:double

8.5.1.117 (element)bUplinkBandwidth

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false
nillable false
type definition xs:double

8.5.1.118 (element)bDownlinkChannelIndex

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false
nillable false
type definition xs:integer

8.5.1.119 (element)bDownlinkFrequency

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false
nillable false

type definition xs:double

8.5.1.120 (element)bDownlinkDataRate

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:double

8.5.1.121 (element)bDownlinkBandwidth

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:double

8.5.1.122 (element)optimizationAttributes

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeOptimizationAttributes](#)

8.5.1.123 (element)endpointA

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeDeviceConnection](#)

8.5.1.124 (element)endpointB

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeDeviceConnection](#)

8.5.1.125 (element)bendpointList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeBendpointList](#)

8.5.1.126 (element)attributeList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeAttributeList](#)

8.5.1.127 (element)planningLink

documentation This element describes a planning link and includes references to the units that are the endpoints of the link.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.128 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes

- [JNMSExport](#) = true

(sequence)

- (element)[id](#)
- (element)[name](#)
- (element)[mediaType](#)
- (element)[nw:functionalArea](#)

content

- (element){0,1} [classification](#)
- (element){0,1} [forwardBandwidth](#)
- (element){0,1} [reverseBandwidth](#)
- (element)[anticipatedLinkSize](#)
- (element)[endpointA](#)
- (element)[endpointB](#)
- (element){0,1} [bendpointList](#)

- (element){0,1} [attributeList](#)

8.5.1.129 (element)id

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeId](#)

8.5.1.130 (element)name

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.131 (element)mediaType

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.132 (element)classification

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeClassification](#)

8.5.1.133 (element)forwardBandwidth

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:double

8.5.1.134 (element)reverseBandwidth

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:double

8.5.1.135 (element)anticipatedLinkSize

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:double

8.5.1.136 (element)endpointA

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeUnitConnection](#)

8.5.1.137 (element)endpointB

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeUnitConnection](#)

8.5.1.138 (element)bendpointList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeBendpointList](#)

8.5.1.139 (element)attributeList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeAttributeList](#)

8.5.1.140 (element)broadcastNetwork

documentation This element describes a broadcast network and includes references to the units that are members of the network.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.141 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

- (element)[id](#)
- (element)[name](#)
- (element)[broadcastNetworkModel](#)
- (element)[classification](#)
- (element)[dataRate](#)
- (element){0,1} [optimizationAttributes](#)
- (element)[frequency](#)
- (element)[nw:frequencyHopGroup](#)
- (element){0,1} [startTime](#)
- (element){0,1} [stopTime](#)
- (element){0,1} [memberList](#)
- (element){0,1} [attributeList](#)

content

8.5.1.142 (element)id

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeId](#)

8.5.1.143 (element)name

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition xs:string

8.5.1.144 (element)broadcastNetworkModel

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition xs:string

8.5.1.145 (element)classification

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeClassification](#)

8.5.1.146 (element)dataRate

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition xs:double

8.5.1.147 (element)optimizationAttributes

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeNetworkOptimizationAttributes](#)

8.5.1.148 (element)frequency

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition xs:double

8.5.1.149 (element)startTime

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

default value 0.0

type definition [nw:typeSimulationTime](#)

8.5.1.150 (element)stopTime

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

default value END

type definition [nw:typeSimulationStopTime](#)

8.5.1.151 (element)memberList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.152 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

content (sequence)

- (element){1,unbounded} [member](#)

8.5.1.153 (element)member

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeUnitPhysicalConnection](#)

8.5.1.154 (element)attributeList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeAttributeList](#)

8.5.1.155 (element)satelliteLink

documentation This element describes a GBS or bentpipe satellite link and includes references to the units that are the endpoints of the link.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false
nillable false

8.5.1.156 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

- (element)[id](#)
- (element)[name](#)
- (element)[satelliteLinkModel](#)
- (element)[datarate](#)

content

- (element){0,1} [optimizationAttributes](#)
- (element)[homeSatellite](#)
- (element)[terminalA](#)
- (element){0,1} [terminalB](#)
- (element){0,1} [bendpointList](#)

8.5.1.157 (element)id

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeId](#)

8.5.1.158 (element)name

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.159 (element)satelliteLinkModel

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false
type definition xs:string

8.5.1.160 (element)datarate

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition xs:double

8.5.1.161 (element)optimizationAttributes

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition [nw:typeOptimizationAttributes](#)

8.5.1.162 (element)homeSatellite

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition [nw:typeUnitPhysicalConnection](#)

8.5.1.163 (element)terminalA

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition [nw:typeUnitPhysicalConnection](#)

8.5.1.164 (element)terminalB

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition [nw:typeUnitPhysicalConnection](#)

8.5.1.165 (element)bendpointList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition [nw:typeBendpointList](#)

8.5.1.166 (element)relationship

documentation This element specifies an abstract hierarchical or support relationship between two units.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.167 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none
(sequence)

- (element)[id](#)
- (element)[CADM:EXRELT_CD](#)
- (element)[refOppositeRelationshipById](#)

content

- (element)[source](#)
- (element)[destination](#)
- (element){0,1} [bendpointList](#)
- (element){0,1} [statusList](#)

8.5.1.168 (element)id

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeId](#)

8.5.1.169 (element)refOppositeRelationshipById

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeId](#)

8.5.1.170 (element)source

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeUnitConnection](#)

8.5.1.171 (element)destination

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeUnitConnection](#)

8.5.1.172 (element)bendpointList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeBendpointList](#)

8.5.1.173 (element)statusList

documentation This element specifies a structured list of start and stop events. The values are simulation times, and so must be non-negative double values or the special value 'END'. The list contains alternating start and stop events, and may end with either start or stop. The values must increase from beginning to end, and there can be no duplicate values in the list. Only the last stop event may have the value 'END'. These requirements are minimally enforced by the schema. Further enforcement would require unintuitive steps, such as giving special names to the first and last entries in the list. The uniqueness of the values cannot be enforced, since Xerces cannot correctly constrain both the numeric values and 'END'.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.174 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none
 (sequence){1,unbounded}
content

- (element)[start](#)
- (element){0,1} [stop](#)

8.5.1.175 (element)start

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
abstract false
nillable false
type definition [nw:typeSimulationTime](#)

8.5.1.176 (element)stop

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
abstract false
nillable false
type definition [nw:typeSimulationStopTime](#)

8.5.1.177 (complex type)typeUnitPhysicalConnection

documentation Elements of this type reference a unit and device pair that is an endpoint or member of an infrastructure element. It may also specify the port in the device that is used by the infrastructure element.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
base type definition ur-type definition
derivation method restriction
abstract false
attributes none
 (sequence)
content

- (element)[refUnitById](#)
- (group)[nw:groupDeviceConnection](#)

8.5.1.178 (element)refUnitById

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
abstract false
nillable false

type definition [nw:typeId](#)

8.5.1.179 (complex type)typeUnitConnection

documentation Elements of this type reference a unit that is an endpoint or member of an "abstract" infrastructure element, such as a relationship.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

content (sequence)

- (element)[refUnitById](#)

8.5.1.180 (element)refUnitById

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeId](#)

8.5.1.181 (complex type)typeDeviceConnection

documentation Elements of this type refer to a device that is an endpoint or member of an infrastructure element. It may also specify the port in that device that is used by the infrastructure element. The unit that contains the device may be specified, but the unit reference is secondary to the device reference and is intended only to simplify XML parsing when the data is from a trusted source. Validation of XML documents will not verify that the device actually exists in the specified unit.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

content (sequence)

- (element){0,1} [refUnitById](#)
- (group)[nw:groupDeviceConnection](#)

8.5.1.182 (element)refUnitById

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeId](#)

8.5.1.183 (element)refDeviceById

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeId](#)

8.5.1.184 (element)refPortByName

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition xs:string

8.5.1.185 (element)frequencyHopGroup

documentation This element specifies the possible values for the hop group setting on physical infrastructure elements that support frequency hopping.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

default value disabled

8.5.1.186 (element)MOPCollection

documentation This element is used by some infrastructure elements to enable or disable collection of associated MOPs.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

default value OFF

8.5.1.187 (element)functionalArea

documentation This element specifies the functional area to which an object is assigned.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.188 (complex type)typeOptimizationAttributes

documentation An element of this type lists the attributes used during the optimization of links. The utilizations guide the optimization process while the capacities limit the suggested changes.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

- (element){0,1} [targetUtilization](#)

content

- (element){0,1} [maximumUtilization](#)
- (element){0,1} [possibleCapacityList](#)

8.5.1.189 (element)targetUtilization

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeOptimizationUtilizations](#)

8.5.1.190 (element)maximumUtilization

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeOptimizationUtilizations](#)

8.5.1.191 (element)possibleCapacityList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.192 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element){1,unbounded} [trunk](#)

8.5.1.193 (element)trunk

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.194 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element)[bandwidth](#)
- (element)[voiceChannelRate](#)
- (element)[voiceChannelNumber](#)

8.5.1.195 (element)bandwidth

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:double

8.5.1.196 (element)voiceChannelRate

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:double

8.5.1.197 (element)voiceChannelNumber

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:nonNegativeInteger

8.5.1.198 (complex type)typeOptimizationUtilizations

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

- content**
- (element){0,1} [voice](#)
 - (element){0,1} [data](#)

8.5.1.199 (element)voice

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:nonNegativeInteger

8.5.1.200 (element)data

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:nonNegativeInteger

8.5.1.201 (complex type)typeNetworkOptimizationAttributes

documentation An element of this type lists the attributes used during the optimization of broadcast networks. The utilizations guide the optimization process while the

data rates limit the suggested changes. Broadcast networks are different than other associations in that they do not support optimization of voice channels.

target namespace	http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type definition	ur-type definition
derivation method	restriction
abstract	false
attributes	none (sequence)
content	<ul style="list-style-type: none"> • (element){0,1} targetUtilization • (element){0,1} maximumUtilization • (element){0,1} possibleCapacityList

8.5.1.202 (element)targetUtilization

target namespace	http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract	false
nillable	false
type definition	xs:nonNegativeInteger

8.5.1.203 (element)maximumUtilization

target namespace	http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract	false
nillable	false
type definition	xs:nonNegativeInteger

8.5.1.204 (element)possibleCapacityList

target namespace	http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract	false
nillable	false

8.5.1.205 (complex type)

target namespace	http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type definition	ur-type definition
derivation method	restriction
abstract	false

attributes none
 (sequence)
content

- (element){1,unbounded} [dataRate](#)

8.5.1.206 (element)dataRate

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition xs:double

8.5.1.207 (element)opfacTemplateList

documentation This element contains a list of template OPFACs that may be loaded into the NETWARS Toolkit for use in constructing scenarios.
target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

8.5.1.208 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type definition ur-type definition
derivation method restriction
abstract false
attributes none
 (sequence)
content

- (element){0,unbounded} [nw:opfacTemplate](#)

8.5.1.209 (element)opfacTemplate

documentation This element describes a template Operational Facility.
target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

8.5.1.210 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type definition ur-type definition
derivation method restriction

- abstract** false
- attributes**
 - (attribute group)[nw:groupOpfacAttributes](#)
 - (sequence)
 - (group)[nw:groupOpfacData](#)
- content**
 - (element){0,1} [profileList](#)
 - (element){0,1} [attributeList](#)
 - (group)[nw:groupOpfacContainment](#)

8.5.1.211 (element)profileList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeProfileList](#)

8.5.1.212 (element)attributeList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeAttributeList](#)

8.5.1.213 (element)opfac

documentation This element describes an instance of an Operational Facility. The instance includes data elements that are not included in the OPFAC template element, since those data elements are only meaningful in the context of an organization or scenario. In addition, the XML OPFAC instance does not support the delayed elaboration that is supported within the Scenario Builder and the network model file.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.214 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

- [JNMSExport](#) = true
- attributes**
- (attribute group)[nw:groupOpfacAttributes](#)
 - [altered](#) = false
- (sequence)
- (element)[CADM:ORG ID](#)
 - (element)[CADM:ORGAD UNIT CMN NM](#)
 - (group){0,1} [nw:groupOpfacData](#)
 - (element){0,1} [tasks](#)
- content**
- (choice){0,1}
 - (element)[nw:unitLocation](#)
 - (element)[nw:trajectory](#)
 - (element){0,1} [nw:JNMSData](#)
 - (element){0,1} [attributeList](#)
 - (group){0,1} [nw:groupOpfacContainment](#)

documentation

This element specifies the name of the OPFAC instance in the organization or scenario. OPFACs of the same type may have different names.

8.5.1.215 (element)tasks

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeUnitTasks](#)

8.5.1.216 (element)attributeList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeAttributeList](#)

documentation

This attribute specifies whether the devices and connections within the OPFAC have been modified. The Toolkit tracks this modification, since a modified OPFAC may be used to create a new template.

documentation

This element specifies the name of the OPFAC template. An OPFAC instance created from this template will have this name as its "type".

8.5.1.217 (element)mil_name

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.218 (element)cost

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

default value 0

type definition xs:integer

8.5.1.219 (element)service

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.220 (element)deviceList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.221 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element){1,unbounded} [nw:device](#)

8.5.1.222 (element)wiredLinkList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.223 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element){1,unbounded} [nw:wiredLink](#)

8.5.1.224 (element)annotationList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeAnnotationList](#)

documentation

This attribute specifies that the OPFAC being described is of a special type. The only legal value at this time is 'utility', which indicates that the OPFAC contains a "utility" node, such as the ATM configuration node. If other special types are required, this attribute can be extended to define an enumerated set of values.

8.5.1.225 (element)JNMSData

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.226 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element)[namedLocation](#)

- (element)[echelon](#)
- (element)[functionalType](#)
- (element)[subscriberUnit](#)
- (element)[responsibleCommunicationsUnit](#)
- (element)[parentResponsibleCommunicationsUnit](#)

8.5.1.227 (element)namedLocation

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.228 (element)echelon

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.229 (element)functionalType

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.230 (element)subscriberUnit

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.231 (element)responsibleCommunicationsUnit

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.232 (element)parentResponsibleCommunicationsUnit

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.233 (element)device

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.234 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes

- [JNMSExport](#) = true

(sequence)

- (element)[id](#)

- (element)[name](#)

- (element)[model](#)

content

- (element){0,1} [equipmentType](#)

- (element){0,1} [classification](#)

- (element)[location](#)

- (element){0,1} [attributeList](#)

8.5.1.235 (element)id

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeId](#)

8.5.1.236 (element)name

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false
type definition xs:string

8.5.1.237 (element)model

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition xs:string

8.5.1.238 (element)equipmentType

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition xs:string

8.5.1.239 (element)classification

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition [nw:typeClassification](#)

8.5.1.240 (element)location

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition [nw:typeDeviceLocation](#)

8.5.1.241 (element)attributeList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition [nw:typeAttributeList](#)

8.5.1.242 (complex type)typeDeviceLocation

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type definition ur-type definition
derivation method restriction
abstract false

- attributes** none
(sequence)
 - (element)[xPosition](#)
- content**
 - (element)[yPosition](#)
 - (element){0,1} [altitude](#)

8.5.1.243 (element)xPosition

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

default value 0

type definition [nw:typeDevicePosition](#)

8.5.1.244 (element)yPosition

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

default value 0

type definition [nw:typeDevicePosition](#)

8.5.1.245 (element)altitude

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

default value 0

type definition xs:double

8.5.1.246 (simple type)typeDevicePosition

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition xs:double

- facets**
 - is greater than or equal to 0
 - is less than or equal to 1113.17

8.5.1.247 (element)ierList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.248 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element){1,unbounded} [nw:ier](#)

8.5.1.249 (element)ier

documentation This element specifies an instance of an Information Exchange Requirement that has been assigned to an OPFAC.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.250 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes

- [label](#) = manual

(sequence)

- (element)[id](#)
- (element){0,1} [description](#)
- (element){0,1} [CADM:EXRELT_CD](#)

content

- (element){0,1} [classification](#)
- (element){0,1} [CADM:IER_MX_TRAN_ELT_QY](#)
- (element){0,1} [CADM:IER_PRCDNCE_CD](#)
- (choice){0,1}
 - (element)[trafficType](#)

- (element)[CADM:DIT_CLS_CD](#)
 - (element){0,1} [equipment](#)
 - (element){0,1} [averageSize](#)
 - (element){0,1} [nw:distribution](#)
 - (element){0,1} [nw:simulationMethod](#)
 - (element){0,1} [transportProtocol](#)
 - (element){0,1} [messageType](#)
 - (element){0,1} [startTime](#)
 - (element){0,1} [stopTime](#)
 - (element){0,1} [refRelationshipById](#)
 - (element)[producer](#)
 - (element){0,1} [consumerList](#)

8.5.1.251 (element)id

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition xs:string

8.5.1.252 (element)description

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition xs:string

documentation

Corresponds to NETWARS URC.

8.5.1.253 (element)classification

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeClassification](#)

documentation

Corresponds to NETWARS perishability.
documentation

Corresponds to NETWARS priority or precedence code.

8.5.1.254 (element)trafficType

documentation This element specifies the NETWARS traffic type.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeTrafficType](#)

documentation

This element corresponds to the NETWARS traffic type. The CADM element IER_PHYSFRMT_TY_CD might be a better choice than DIT_CLS_CD, but the standard set of NETWARS traffic type values matches DIT_CLS_CD better than IER_PHYSFRMT_TY_CD.

8.5.1.255 (element)equipment

documentation This element specifies the kind of equipment utilized the IER. Typical values are 'Computer' and 'Radio', but NETWARS allows arbitrary values in this IER field.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition xs:string

8.5.1.256 (element)averageSize

documentation This element specifies the average size of the message. The units are seconds for voice messages and bytes for data messages. This element should properly be split into two elements, CADM:IER_VOCVID_ELT_QY and CADM:IER_PRD_DTSZ_QY.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.257 (element)transportProtocol

documentation This element specifies the transport layer protocol that will be used to send the

IER.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
default value Not Applicable

8.5.1.258 (element)messageType

documentation This element contains a user-specifiable value describing the type of message represented by the IER.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

8.5.1.259 (element)startTime

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
default value THREAD
type definition [nw:typeSimulationThreadTime](#)

8.5.1.260 (element)stopTime

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
default value END
type definition [nw:typeSimulationStopTime](#)

8.5.1.261 (element)refRelationshipById

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition [nw:typeId](#)

8.5.1.262 (element)producer

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false

nillable false
type definition [nw:typeIerOpfacRef](#)

8.5.1.263 (element)consumerList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
abstract false
nillable false

8.5.1.264 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
base type definition ur-type definition
derivation method restriction
abstract false
attributes none
 (sequence)
content

- (element){1,unbounded} [consumer](#)

8.5.1.265 (element)consumer

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
abstract false
nillable false
type definition [nw:typeIerOpfacRef](#)

documentation

This attribute specifies whether the IER was created or modified manually by the user or has not been modified since being queried from a database or text file and is therefore recoverable from its original source.

8.5.1.266 (simple type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
base type definition xs:string

- is one of the values:
 - manual
 - recoverable
 - deleted
- facets**

8.5.1.267 (simple type)typeTrafficType

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition xs:string

- is one of the values:
 - COURIER/MANUAL
 - FACSIMILE
 - DIGITAL ASCII DATA
 - DIGITAL BIT-ORIENTED DATA
 - IMAGE
 - TEXT ASCII
 - VIDEO LIVE
 - POSITION AND NAVIGATION
 - VIDEO STILL FRAME
 - VOICE
 - VTC
 - NOT SPECIFIED
 - NOT KNOWN

facets

8.5.1.268 (element)distribution

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.269 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none
(sequence)

- content**
- (element)[function](#)
 - (element)[mean](#)

8.5.1.270 (element)function

documentation This element specifies the function to be used to distribute the interarrival

times of IER messages.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
default value UNIFORM

8.5.1.271 (element)mean

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition [nw:typeSimulationTime](#)

8.5.1.272 (element)simulationMethod

documentation This element specifies the kind of traffic that will be generated from the IER during simulation.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

8.5.1.273 (complex type)typeIerOpfacRef

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type definition ur-type definition
derivation method restriction
abstract false
attributes none
 (sequence)
content

- (element)[refOpfacById](#)
- (element){0,1} [refDeviceById](#)

8.5.1.274 (element)refOpfacById

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition [nw:typeId](#)

8.5.1.275 (element)refDeviceById

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeId](#)

8.5.1.276 (element)threadList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.277 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element){1,unbounded} [thread](#)

8.5.1.278 (element)thread

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.279 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element)[id](#)
- (element)[name](#)
- (element)[UJTL](#)
- (element){0,1} [collectMOPs](#)

- (element){0,1} [startTime](#)
- (element){0,1} [stopTime](#)
- (choice){0,1}
 - (element)[nw:distribution](#)
 - (element)[threadTrigger](#)
- (element)[refOwnerById](#)
- (element)[nw:segmentList](#)

8.5.1.280 (element)id

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeThreadId](#)

8.5.1.281 (element)name

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition xs:string

8.5.1.282 (element)UJTL

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition xs:string

8.5.1.283 (element)collectMOPs

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

default value false

type definition xs:boolean

8.5.1.284 (element)startTime

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false
nillable false
default value 0.0
type definition [nw:typeSimulationTime](#)

8.5.1.285 (element)stopTime

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
default value END
type definition [nw:typeSimulationStopTime](#)

8.5.1.286 (element)threadTrigger

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

8.5.1.287 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type definition ur-type definition
derivation method restriction
abstract false
attributes none
 (sequence)
content

- (element)[refThreadById](#)
- (element)[refSegmentByIndex](#)

8.5.1.288 (element)refThreadById

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition [nw:typeThreadId](#)

8.5.1.289 (element)refSegmentByIndex

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

type definition xs:positiveInteger

8.5.1.290 (element)refOwnerById

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeId](#)

8.5.1.291 (simple type)typeThreadId

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition xs:string

facets

- matches the pattern $\text{TH}[0-9]\{4\}-[0-9]\{6\}$

8.5.1.292 (element)segmentList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.293 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element){1,unbounded} [segment](#)

8.5.1.294 (element)segment

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.295 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation restriction

method	
abstract	false
attributes	none
	(sequence)
	<ul style="list-style-type: none"> • (element)index
content	<ul style="list-style-type: none"> • (element){0,1} critical • (element){0,1} nw:distribution • (choice) • The condition on which a segment is fired can take one of two forms. Segments that are fired when the thread begins have the condition 'Start'. Other segments fire upon the completion of one or more other segments in the thread. A segment that depends on other segments lists the indices of those segments as its condition. This schema does not enforce the requirement that the first segment in the list use a "Start" condition.(element)condition
documentation	<ul style="list-style-type: none"> • (element)conditionList • (element)refReactionIERById • (element)refProducerById • (element)consumerList

8.5.1.296 (element)index

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:positiveInteger

8.5.1.297 (element)critical

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

default value true

type definition xs:boolean

documentation

The condition on which a segment is fired can take one of two forms. Segments that are fired when the thread begins have the condition 'Start'. Other segments fire upon the completion of one or more other segments in the thread. A segment that depends on other segments lists the

indices of those segments as its condition. This schema does not enforce the requirement that the first segment in the list use a "Start" condition.

8.5.1.298 (element)condition

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

fixed value Start

type definition xs:string

8.5.1.299 (element)conditionList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.300 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content
 • (element){1,unbounded} [condition](#)

8.5.1.301 (element)condition

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:positiveInteger

8.5.1.302 (element)refReactionIERById

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.303 (element)refProducerById

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false
nillable false
type definition [nw:typeId](#)

8.5.1.304 (element)consumerList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false
nillable false

8.5.1.305 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false
attributes none
 (sequence)

content

- (element){1,unbounded} [refConsumerById](#)

8.5.1.306 (element)refConsumerById

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false
nillable false

type definition [nw:typeId](#)

8.5.1.307 (element)globalFunctionalProfileList

documentation This element contains a list of global Functional Profiles, which are shared by all scenarios. It may be used to store the global profiles in an external document.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

8.5.1.308 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none
 (sequence)
content

- (element){0,unbounded} [nw:globalFunctionalProfile](#)

8.5.1.309 (element)globalFunctionalProfile

documentation This element specifies a global Functional Profile, which contains several Functional Names. Each global profile may be referenced by zero or more OPFACs.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nilable false

8.5.1.310 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes

- [name](#)

(sequence)
content

- (element){0,unbounded} [nw:functionalName](#)

8.5.1.311 (element)localFunctionalProfile

documentation This element specifies a local Functional Profile, which contains several Functional Names. Each OPFAC has exactly one profile, although the profile may reference a global functional profile instead of using its own functional names.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nilable false

8.5.1.312 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

- attributes**
 - [globalRef](#)
- (sequence)
- content**
 - (element){0,unbounded} [nw:functionalName](#)

documentation

Since the global functional profiles are stored separately from the OPFACs or scenarios, references to global profile names cannot be validated.

8.5.1.313 (element)functionalName

documentation This element specifies a single Functional Name. Each OPFAC queries IERs using all of its Functional Names. The simulation method will be applied to all IERs matching the functional name.

- target namespace** <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
- abstract** false
- nillable** false

8.5.1.314 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
base type definition ur-type definition

- derivation method** restriction
- abstract** false
- attributes** none
- (sequence)
- content**
 - (element)[name](#)
 - (element)[nw:simulationMethod](#)

8.5.1.315 (element)name

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
abstract false
nillable false
type definition xs:string

8.5.1.316 (complex type)typeAnnotationList

documentation An element of this type contains a list of annotation elements. Annotations are embellishments drawn in the network, such as boxes, lines, and text.

- target** <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

namespace
base type definition ur-type definition
derivation method restriction
abstract false
attributes none
content (sequence)

- (element){1,unbounded} [annotation](#)

8.5.1.317 (element)annotation

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

8.5.1.318 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type definition ur-type definition
derivation method restriction
abstract false
attributes

- [type](#)

(sequence)

- (element)[name](#)

content

- (element){0,1} [bendpointList](#)
- (element){0,1} [attributeList](#)

8.5.1.319 (element)name

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition xs:string

8.5.1.320 (element)bendpointList

documentation Only annotations of type 'Line' should specify bendpoints.
target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false

nillable false
type definition [nw:typeBendpointList](#)

8.5.1.321 (element)attributeList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition [nw:typeAttributeList](#)

8.5.1.322 (complex type)typeFlowList

documentation An element of this type contains a list of flow elements. A flow specifies traffic between exactly two devices.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type definition ur-type definition
derivation method restriction
abstract false
attributes none
content (sequence)

- (element){1,unbounded} [flow](#)

8.5.1.323 (element)flow

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition [nw:typeStandardConnection](#)

8.5.1.324 (complex type)typeConnectionList

documentation An element of this type contains a list of connection elements. A connection connects exactly two devices and may be used for abstract connections such as PVCs.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type definition ur-type definition
derivation restriction

method
abstract false
attributes none
 (sequence)
content

- (element){ 1,unbounded} [connection](#)

8.5.1.325 (element)connection

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false
nillable false
type definition [nw:typeStandardConnection](#)

8.5.1.326 (complex type)typeStandardConnection

documentation An element of this type is connects exactly two devices and may represent various types of associations between them.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
base type definition ur-type definition
derivation method restriction
abstract false
attributes none
 (sequence)

- (element)[name](#)
- (element)[model](#)

content

- (element)[endpointA](#)
- (element)[endpointB](#)
- (element){0,1} [attributeList](#)

8.5.1.327 (element)name

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false
nillable false
type definition xs:string

8.5.1.328 (element)model

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.329 (element)endpointA

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.330 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element)[refDeviceById](#)

8.5.1.331 (element)refDeviceById

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeId](#)

8.5.1.332 (element)endpointB

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.333 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

content (sequence)

- (element)[refDeviceById](#)

8.5.1.334 (element)refDeviceById

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeId](#)

8.5.1.335 (element)attributeList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeAttributeList](#)

8.5.1.336 (complex type)typePathList

documentation An element of this type contains a list of path elements. A path connects two or more devices and may be used for traffic routing.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none
(sequence)

content

- (element){1,unbounded} [path](#)

8.5.1.337 (element)path

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.338 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract	false
attributes	none (sequence) <ul style="list-style-type: none"> • (element)name
content	<ul style="list-style-type: none"> • (element)model • (element)pathPointList • (element){0,1} attributeList

8.5.1.339 (element)name

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.340 (element)model

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.341 (element)pathPointList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.342 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none
(sequence)

content

- (element){2,unbounded} [refDeviceById](#)

8.5.1.343 (element)refDeviceById

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false
nillable false
type definition [nw:typeId](#)

8.5.1.344 (element)attributeList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false
nillable false
type definition [nw:typeAttributeList](#)

8.5.1.345 (complex type)typeBendpointList

documentation An element of this type contains a list of bendpoints. A bendpoint specifies a point at which a visual line changes direction. Bendpoints are specified for links, connections, and annotations.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
base type definition ur-type definition
derivation method restriction
abstract false
attributes none
content (sequence)

- (element){1,unbounded} [bendpoint](#)

8.5.1.346 (element)bendpoint

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false
nillable false

8.5.1.347 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction
abstract false
attributes none
content (sequence)

- (element)[x](#)

- (element)y

8.5.1.348 (element)x

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeLongitude](#)

8.5.1.349 (element)y

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeLatitude](#)

8.5.1.350 (simple type)typeId

documentation This type specifies the type of the ID element used to identify organization, OPFAC and device elements, and also of the reference elements used to specify connections to the units by the infrastructure elements. This type must match the type of the CADM:ORG_ID element. (No way was found to directly use the definition of the CADM element to specify the ID type.)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition xs:long

facets

8.5.1.351 (simple type)typeUnitTasks

documentation An element of this type specifies the free-text description of the tasks assigned to a unit.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition xs:string

facets

8.5.1.352 (element)trajectory

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.353 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element){1,unbounded} [nw:unitLocationStep](#)

8.5.1.354 (element)unitLocation

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.355 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element){0,1} [lockPosition](#)
- (group)[nw:groupUnitLocation](#)

8.5.1.356 (element)lockPosition

documentation This element specifies whether the unit is locked to its current location.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

default value false

type definition xs:boolean

8.5.1.357 (element)unitLocationStep

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.358 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none
(sequence)

content

- (element)[CADM:ORGP_SEQ_ID](#)
- (group)[nw:groupUnitLocation](#)

8.5.1.359 (element)elapsedTime

This element specifies the elapsed time for which the unit occupies the location.

documentation The equivalent CADM attribute, C_ORGLOCPT_ELT_QY, is not used because it does not allow fractional values.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

default value 0.0

type definition [nw:typeSimulationTime](#)

8.5.1.360 (element)latitude

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeLatitude](#)

8.5.1.361 (element)longitude

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeLongitude](#)

8.5.1.362 (element)elevationDimension

documentation This element corresponds to the CADM attribute MEASURED-ELEVATION-POINT ELEVATION DIMENSION. The CADM attribute is not referenced directly because it is limited to integer precision, whereas NETWARS requires

fractional precision. The value of the element CADM:PT_ELEV_TY_CD determines the meaning of this elevation value.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
default value 0
type definition xs:float

8.5.1.363 (simple type)typeLatitude

documentation An element of this type specifies the latitude of an object in units of degrees, north or south of the equator. The equivalent CADM attribute, C_PT_LAT_COORD, is not used because it assumes a different coordinate system.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type definition xs:decimal

- facets**
- is greater than or equal to -90.0
 - is less than or equal to 90.0

8.5.1.364 (simple type)typeLongitude

documentation An element of this type specifies the longitude of an object in units of degrees, east or west of the zero meridian. The equivalent CADM attribute, C_PT_LON_COORD, is not used because it assumes a different coordinate system.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type definition xs:decimal

- facets**
- is greater than or equal to -180.000000
 - is less than or equal to 180.000000

8.5.1.365 (simple type)typeSimulationTime

documentation An element of this type specifies legal values for a simulation time point or duration. The values are measured in seconds.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition xs:double

facets

- is greater than or equal to 0

8.5.1.366 (simple type)typeSimulationStopTime

documentation This type extends the basic simulation time type to accept a special value for the end of the simulation. For simulation and evaluation, the special value should be replaced with the current simulation duration.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

- [nw:typeSimulationTime](#)

8.5.1.367 (simple type)

union

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition xs:string

facets

- is one of the values:
 - END

8.5.1.368 (simple type)typeSimulationThreadTime

documentation This type extends the basic simulation time type to accept a special value used in IERs. The value indicates that the IER has no specific start time, but is instead started by the thread that contains it.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

- [nw:typeSimulationTime](#)

8.5.1.369 (simple type)

union

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition xs:string

facets

- is one of the values:

▪ THREAD

8.5.1.370 (complex type)typeProfileList

An element of this type contains a list of profile definitions. A profile is a named set of two-dimensional points that describe a line on a graph. They are commonly used to represent a value that changes over time. profileName attributes refer to a profile element by name, so that attributes can share the profile definitions.

documentation

- target namespace** http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
- base type definition** ur-type definition
- derivation method** restriction
- abstract** false
- attributes** none
- content**
 - (sequence)
 - (element){1,unbounded} [profile](#)

8.5.1.371 (element)profile

- target namespace** http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
- abstract** false
- nillable** false

8.5.1.372 (complex type)

- target namespace** http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
- base type definition** ur-type definition
- derivation method** restriction
- abstract** false
- attributes** none
- content**
 - (sequence)
 - (element)[name](#)
 - (element)[xUnits](#)
 - (element)[yUnits](#)
 - (element){0,1} [entryList](#)

8.5.1.373 (element)name

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.374 (element)xUnits

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.375 (element)yUnits

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.376 (element)entryList

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.377 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

content

- (element){1,unbounded} [entry](#)

8.5.1.378 (element)entry

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.379 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none
(sequence)

content

- (element)[x](#)
- (element)[y](#)

8.5.1.380 (element)x

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition xs:double

8.5.1.381 (element)y

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition xs:double

8.5.1.382 (complex type)typeAttributeList

documentation An element of this type contains a mixed list of simple and compound attributes. A simple attribute has a simple value, such as an integer. A compound attribute has a value consisting of a list of other simple or compound attributes. Both simple and compound attributes may alternately have a symbolic value, which is a string that stands for another value of the type appropriate for that attribute. For example, an integer attribute that records a buffer size might allow a symbolic value "Large" that stands for the real value 2048. All attributes also have a name and an "intended" flag. The "intended" flag indicates whether a user explicitly set the value, i.e. a user "intended" the attribute to have that value.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false
attributes none
 (sequence)
content

- (group){1,unbounded} [nw:groupAttributeSet](#)

documentation

This group is used by both typeAttributeList and compoundAttribute/row. It specifies all of the standard attributes elements.

8.5.1.383 (element)integer

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false
nillable false

8.5.1.384 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false
attributes

- (attribute group)[nw:attrGroupAttribute](#)

 (choice)
content

- (element)[value](#)
- (element)[symbolicValue](#)

8.5.1.385 (element)value

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false
nillable false

type definition xs:integer

8.5.1.386 (element)symbolicValue

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false
nillable false

type definition [nw:typeSymbolicValue](#)

8.5.1.387 (element)double

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.388 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes

- (attribute group)[nw:attrGroupAttribute](#)

(choice)

content

- (element)[value](#)
- (element)[symbolicValue](#)

8.5.1.389 (element)value

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition xs:double

8.5.1.390 (element)symbolicValue

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeSymbolicValue](#)

8.5.1.391 (element)string

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.392 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

- attributes**
 - (attribute group)[nw:attrGroupAttribute](#)
- (choice)
- content**
 - (element)[value](#)
 - (element)[symbolicValue](#)

8.5.1.393 (element)value

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition xs:string

8.5.1.394 (element)symbolicValue

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeSymbolicValue](#)

8.5.1.395 (element)profileName

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

8.5.1.396 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

- attributes**
 - (attribute group)[nw:attrGroupAttribute](#)
- (choice)
 - (sequence)
 - (element)[value](#)
 - (element){0,1} [library](#)
 - (element)[symbolicValue](#)

8.5.1.397 (element)value

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.398 (element)library

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.399 (element)symbolicValue

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeSymbolicValue](#)

8.5.1.400 (element)textlist

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.401 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes • (attribute group)[nw:attrGroupAttribute](#)
(choice)

content • (element){0,unbounded} [entry](#)
• (element)[symbolicValue](#)

8.5.1.402 (element)entry

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.403 (element)symbolicValue

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeSymbolicValue](#)

8.5.1.404 (element)toggle

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.405 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes

- (attribute group)[nw:attrGroupAttribute](#)

(choice)

content

- (element)[value](#)
- (element)[symbolicValue](#)

8.5.1.406 (element)value

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeToggleValue](#)

8.5.1.407 (element)symbolicValue

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeSymbolicValue](#)

8.5.1.408 (element)typedFile

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false
nillable false

8.5.1.409 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes • (attribute group)[nw:attrGroupAttribute](#)
 (choice)

content • (element)[value](#)
 • (element)[symbolicValue](#)

8.5.1.410 (element)value

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition xs:string

8.5.1.411 (element)symbolicValue

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

type definition [nw:typeSymbolicValue](#)

8.5.1.412 (element)color

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.1.413 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

base type definition ur-type definition

derivation method restriction

abstract false

attributes • (attribute group)[nw:attrGroupAttribute](#)

- (choice)
- content**
- (element)[value](#)
 - (element)[symbolicValue](#)

8.5.1.414 (element)value

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nilable false

8.5.1.415 (element)symbolicValue

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nilable false

type definition [nw:typeSymbolicValue](#)

8.5.1.416 (element)other

documentation Some attribute types are not exposed to NETWARS and are specified only as "other". These attributes are treated as strings.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nilable false

8.5.1.417 (complex type)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes

- (attribute group)[nw:attrGroupAttribute](#)

(choice)

- content**
- (element)[value](#)
 - (element)[symbolicValue](#)

8.5.1.418 (element)value

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false
type definition xs:string

8.5.1.419 (element)symbolicValue

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false
type definition [nw:typeSymbolicValue](#)

8.5.1.420 (element)compoundAttribute

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

8.5.1.421 (complex type)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type definition ur-type definition
derivation method restriction
abstract false
attributes

- (attribute group)[nw:attrGroupAttribute](#)
 (choice)

content

- (element){0,unbounded} [row](#)
- (element)[symbolicValue](#)

8.5.1.422 (element)row

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

8.5.1.423 (complex type)

documentation Unlike other lists of attributes, row elements may be empty. This occurs when all of its attributes are "unintended" and the export of unintended attributes is disabled. In the same circumstance, other attribute lists are omitted, but each row is necessary to ensure that following rows are correctly indexed.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type ur-type definition

definition
derivation method restriction
abstract false
attributes none
 (sequence)
content

- (group){0,unbounded} [nw:groupAttributeSet](#)

8.5.1.424 (element)symbolicValue

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false
nillable false

type definition [nw:typeSymbolicValue](#)

8.5.1.425 (simple type)typeSymbolicValue

documentation This type is a shared definition for symbolic values in all NETWARS attributes.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition xs:string
facets

8.5.1.426 (simple type)typeToggleValue

documentation This type is used by NETWARS toggle attributes.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition xs:string

- is one of the values:
 - enabled
 - disabled

facets

documentation

This group specifies the XML attributes that are common to all NETWARS attribute elements.

8.5.1.427 (simple type)typeClassification

documentation An element of this type specifies a classification level. Since NETWARS allows users to specify custom classification levels, this type allows any string. The standard set of classification levels consists of Unclassified, Classified,

Confidential, Secret, and Top Secret. The CADM:SC_CD element is not used since it does not match the standard NETWARS classification levels and is not customizable.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type definition xs:string
facets

8.5.1.428 (element)nameMap

This element defines a "name map" that specifies a mapping between from a set of source names to a set of target names. Name maps are used to manipulate the names of items, such as device models, during import and export in NETWARS. For example, when exporting a scenario, NETWARS may use a map to convert its native device model names to the names of similar device models used in another system. The set of native NETWARS device model names is the source set. The set of names in the other system is the target set. When importing, the roles are reversed and the native NETWARS device model names are the target set.

documentation

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nilable false
type definition [nw:typeNameMap](#)

8.5.1.429 (complex type)typeNameMap

documentation An element of this type specifies a complete mapping from the source name set to the target name set.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
base type definition ur-type definition
derivation method restriction
abstract false
attributes none
 (sequence)
content

- (element){0,1} [entryList](#)
- (element){0,1} [unmappedSourceList](#)

8.5.1.430 (element)entryList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeEntryList](#)

8.5.1.431 (element)unmappedSourceList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeSourceList](#)

8.5.1.432 (simple type)typeMapName

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition xs:string

facets

8.5.1.433 (complex type)typeSourceList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

content (sequence)

- (element){1,unbounded} [sourceName](#)

8.5.1.434 (element)sourceName

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeMapName](#)

8.5.1.435 (complex type)typeEntryList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

- content** (sequence)
- (element){1,unbounded} [entry](#)

8.5.1.436 (element)entry

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeEntry](#)

8.5.1.437 (complex type)typeEntry

documentation An element of this type specifies a single map entry. All source names in an entry will map to the target name.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

base type definition ur-type definition

derivation method restriction

abstract false

attributes none

(sequence)

- content**
- (element){0,1} [sourceList](#)
 - (element)[targetName](#)

8.5.1.438 (element)sourceList

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeSourceList](#)

8.5.1.439 (element)targetName

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>

abstract false

nillable false

type definition [nw:typeMapName](#)

8.5.2 Imported Schema

schema location NETWARS_ALL_CADM_18JUN03_NAMESPACE.xsd

target namespace http://www.netwars.disa.mil/ALL_CADM_18JUN03

This schema coerces the ALL_CADM schema created by IDA into a namespace that is similar to the main NETWARS namespace. The ALL_CADM elements are placed outside the main NETWARS schema so that CADM and non-CADM elements may be clearly distinguished using the namespaces. The ALL_CADM schema does not specify a target namespace, allowing this coercion.

8.5.3 Included Schema

schema location ALL_CADM_18JUN03.xsd

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

8.5.3.1 (element)DIT_CLS_CD

(63155/1) (A) THE CODE THAT REPRESENTS A SPECIFIC GROUPING OF A DATA-ITEM-TYPE. ORACLE Data Type = NUMBER(2)

documentation 01 = C--COURIER/MANUAL; 02 = F--FACSIMILE; 03 = A-DIGITAL ASCII DATA; 04 = B-DIGITAL BIT-ORIENTED DATA; 05 = I--IMAGE; 06 = T--TEXT ASCII; 07 = L--VIDEO LIVE; 08 = P--POSITION AND NAVIGATION; 09 = S--VIDEO STILL FRAME; 10 = V--VOICE; 98 = NOT SPECIFIED; 99 = NOT KNOWN.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

abstract false

nillable false

8.5.3.2 (element)EXRELT_CD

(63177/1) (A) THE CODE THAT REPRESENTS A KIND OF SPECIFIC EXCHANGE-RELATIONSHIP-TYPE. ORACLE Data Type = CHAR(2)

documentation 00 = INTRA (WITHIN THE SAME UNIT); 0A = HIGHER TO LOWER IN CHAIN OF COMMAND; 0C = SUPPORTED TO DIRECT SUPPORT (AIR DEFENSE ARTILLERY & ENGINEER SUPPORT); 0D = SUPPORTED TO GENERAL SUPPORT (AIR DEFENSE ARTILLERY & ENGINEER SUPPORT); 0F = REINFORCED UNIT TO GENERAL SUPPORT REINFORCING (GSR) UNIT; 0G = SUPPORTED TO AREA SUPPORT; 98 = NOT SPECIFIED; 99 = NOT KNOWN; A0 = LOWER TO HIGHER IN CHAIN OF COMMAND; AA = COMPANY TO COMPANY (DIFFERENT COMPANY -SAME BATTALION); BT = U.S. ARMY UNIT TO NATO MILITARY; C0 = DIRECT SUPPORT TO SUPPORTED (AIR DEFENSE

ARTILLERY & ENGINEER; C0 = SUPPORT); D0 = GENERAL SUPPORT TO SUPPORTED (AIR DEFENSE ARTILLERY & ENGINEER SUPPORT); F0 = GENERAL SUPPORT REINFORCING (GSR) UNIT TO REINFORCED UNIT; G0 = AREA SUPPORT TO SUPPORTED; GM = GENERAL SUPPORT TO MUTUAL SUPPORTED; JK = THEATER (ARMY) UNIT TO HOST NATION (CIVIL); KJ = HOST NATION (CIVIL) TO THEATER (ARMY); LL = COMPANY TO COMPANY (DIFFERENT BATTALION - SAME BRIGADE); LM = ADJACENT US DIVISION/CORPS UNIT TO DIVISION/CORPS UNIT; LP = HOST NATION UNIT TO CORPS UNIT; MG = MUTUAL SUPPORT UNIT RECEIVING GENERAL SUPPORT; ML = DIVISION/CORPS UNIT TO ADJACENT DIVISION/CORPS UNIT; MN = DIVISION/CORPS UNIT TO ADJACENT ALLIED DIVISION/CORPS UNIT; MP = CORPS TO THEATER (ECHELONS ABOVE CORPS); NM = ADJACENT ALLIED DIVISION/CORPS UNIT TO DIVISION/CORPS UNIT; NP = OTHER U.S. SERVICE UNIT TO U.S. ARMY UNIT; PL = CORPS UNIT TO HOST NATION UNIT; PM = THEATER (ECHELONS ABOVE CORPS) TO CORPS; PN = U.S. ARMY UNIT TO OTHER U.S. SERVICE UNIT; PT = THEATER TO THEATER (INCLUDES CONUS); RR = COMPANY TO COMPANY (DIFFERENT BRIGADE -SAME DIVISION); TB = NATO MILITARY TO U.S. ARMY UNIT; UU = COMPANY TO COMPANY (DIFFERENT DIVISION -SAME CORPS); ZZ = UNDEFINED.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

8.5.3.3 (element)IER_MX_TRAN_ELT_QY

documentation (64143/2) (A) THE ELAPSED-TIME QUANTITY THAT REPRESENTS THE EXTREME UPPER LIMIT TO THE PERMITTED TIME THAT CAN ELAPSE FROM THE TIME SENT TO THE TIME RECEIVED FOR A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT. ORACLE Data Type = NUMBER

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

8.5.3.4 (element)IER_PRCDNCE_CD

documentation (63236/1) (A) THE CODE THAT REPRESENTS THE URGENCY OF A SPECIFIC INFORMATION-EXCHANGE-REQUIREMENT. ORACLE Data Type = CHAR(1)

N = NOT SPECIFIED; O = IMMEDIATE; P = PRIORITY; R = ROUTINE; X

= NOT KNOWN; Y = FLASH OVERRIDE; Z = FLASH.

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

8.5.3.5 (element)ORG_ID

documentation (7875/2) (A) THE IDENTIFIER THAT REPRESENTS AN ADMINISTRATIVE STRUCTURE WITH A MISSION. ORACLE Data Type = NUMBER(20)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

8.5.3.6 (element)ORG_DESCR_TX

documentation (4882/2) (A) THE TEXT DESCRIBING AN ORGANIZATION. ORACLE Data Type = VARCHAR2(999)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

8.5.3.7 (element)ORGAD_UNIT_CMN_NM

documentation (63028/1) (A) THE NAME NORMALLY APPLIED TO AN ORGANIZATION-ARCHITECTURE-DETAIL. ORACLE Data Type = VARCHAR2(250)

target namespace http://www.netwars.disa.mil/2007/2007.01.26/NETWARS
abstract false
nillable false

8.5.3.8 (element)ORGP_SEQ_ID

documentation (64006/1) (A) THE IDENTIFIER THAT REPRESENTS THE RELATIVE POSITION OF A FACILITY-LOCATION-POINT AMONG THE SET OF FACILITY-LOCATION-POINTS ASSOCIATED WITH A SPECIFIC FACILITY. ORACLE Data Type = NUMBER(9)

target http://www.netwars.disa.mil/2007/2007.01.26/NETWARS

namespace

abstract false
nillable false

8.5.3.9 (element)ORGT_NM

documentation (33182/1) (A) THE NAME OF AN ORGANIZATION-TYPE. ORACLE Data Type = VARCHAR2(250)

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
abstract false
nillable false

8.5.3.10 (element)PT_ELEV_TY_CD

(16256/1) (X) THE CODE THAT REPRESENTS THE WAY IN WHICH ELEVATION IS SPECIFIED FOR A POINT. ORACLE Data Type = CHAR(1)

documentation 1 = A--MEASURED-ELEVATION-POINT; 2 = B--SEA-SURFACE-POINT; 3 = C--SEA-FLOOR-POINT; 4 = D--LAND-SURFACE-POINT; 5 = E--UNSPECIFIED-ELEVATION-POINT.

target namespace <http://www.netwars.disa.mil/2007/2007.01.26/NETWARS>
abstract false
nillable false