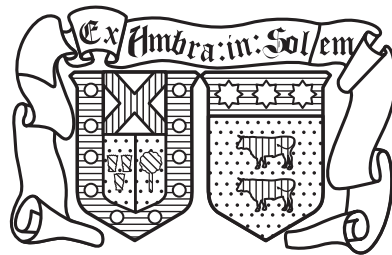


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Neuronment v1.0
Reference Manual
Version 0.1

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Abstract

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Chapter 1

Introduction

Chapter 2

Messages

The following section includes all the possible interface messages and their description.

2.1 Reading Nproc File Issues

2.1.1 IN-001

- Interface Message:

NProc directive not recognized

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: NO
- Message Description:

The directive trying to get interpreted is not on the list of possible directives. Please go to the Reference Manual chapter "Directives" to get a full list of valid directives.

2.1.2 IN-002

- Interface Message:

Trying to report an undeclared variable

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: NO

2.1.3 IN-003

- Interface Message:

Redefining a previously stored setting

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: NO

2.1.4 IN-004

- Interface Message:

Nproc unidentified command, ignoring line

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: NO

2.1.5 IN-005

- Interface Message:

Nproc unidentified setting, ignoring line

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: NO

2.1.6 IN-007

- Interface Message:

A boolean argument has not been properly written. Will be interpreted as false

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: NO

2.1.7 IN-010

- Interface Message:

NProc incorrect amount of arguments for directive, ignoring line

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: NO

2.2 Command Line Issues

2.2.1 UI-001

- Interface Message:

Duplicated or contradictory flags on command call

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.2.2 UI-002

- Interface Message:

Flag expected

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.2.3 UI-003

- Interface Message:

Flag not recognized, flag omitted

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: NO

2.2.4 UI-004

- Interface Message:

Label without content

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.2.5 UI-006

- Interface Message:

Empty NProc name

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.3 File IO Issues

2.3.1 ER-001

- Interface Message:

The program arrived to an unexpected set of conditions

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: NO

2.3.2 ER-002

- Interface Message:

Something went wrong running the program. Terminating

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: NO

2.3.3 ER-003

- Interface Message:

File couldn't be opened

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.3.4 ER-004

- Interface Message:

File couldn't be properly closed

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: NO

2.3.5 ER-005

- Interface Message:

Trying to get a new line from a non ready file

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.3.6 ER-006

- Interface Message:

Trying to get a new line from a file already at the end

- Development Assertion: YES
- Implementation Assertion: NO
- Runtime Assertion: NO

2.3.7 ER-007

- Interface Message:

Fail on getting a new line from nproc file

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.3.8 ER-008

- Interface Message:

There is a problem with the implementation

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.3.9 ER-009

- Interface Message:

Trying to close an unopened file

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: NO

2.3.10 ER-010

- Interface Message:

Required file is empty

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.4 Implementation Issues

2.4.1 DV-001

- Interface Message:

Missing implementation

- Development Assertion: NO
- Implementation Assertion: YES
- Runtime Assertion: NO

2.4.2 DV-002

- Interface Message:

Trying to declare a previously declared setting

- Development Assertion: NO
- Implementation Assertion: YES
- Runtime Assertion: NO

2.4.3 DV-003

- Interface Message:

Trying to load a setting of an unsupported type

- Development Assertion: NO
- Implementation Assertion: YES
- Runtime Assertion: NO

2.4.4 DV-005

- Interface Message:

Trying to use an unsupported setting

- Development Assertion: NO
- Implementation Assertion: YES
- Runtime Assertion: NO

2.4.5 DV-006

- Interface Message:

Trying to read an incorrect data type for the setting

- Development Assertion: NO
- Implementation Assertion: YES
- Runtime Assertion: NO

2.4.6 DV-007

- Interface Message:

The setting count is different than the declared setting count on the HashEntry

- Development Assertion: NO
- Implementation Assertion: YES
- Runtime Assertion: NO

2.4.7 DV-012

- Interface Message:

Trying a quick access of incorrect type

- Development Assertion: NO
- Implementation Assertion: YES
- Runtime Assertion: NO

2.4.8 DV-013

- Interface Message:

Hash Table Full

- Development Assertion: NO
- Implementation Assertion: YES
- Runtime Assertion: NO

2.4.9 DV-015

- Interface Message:

Setting declared but hasn't been initialized

- Development Assertion: NO
- Implementation Assertion: YES
- Runtime Assertion: NO

2.4.10 DV-017

- Interface Message:

Discrepancy on neuron type on assignment

- Development Assertion: NO
- Implementation Assertion: YES
- Runtime Assertion: NO

2.4.11 DV-018

- Interface Message:

Trying to quick retrieve un-existent value

- Development Assertion: NO
- Implementation Assertion: YES
- Runtime Assertion: NO

2.4.12 SD-030

- Interface Message:

Internal simulation pointer corruption

- Development Assertion: NO
- Implementation Assertion: YES
- Runtime Assertion: NO

2.4.13 SD-031

- Interface Message:

Trying to compare 2 identical MT cells

- Development Assertion: NO
- Implementation Assertion: YES
- Runtime Assertion: NO

2.5 Reporting Issues

2.5.1 RP-001

- Interface Message:

Trying to open an already opened stream

- Development Assertion: NO
- Implementation Assertion: YES
- Runtime Assertion: NO

2.5.2 RP-002

- Interface Message:

Trying to close a non opened stream

- Development Assertion: NO
- Implementation Assertion: YES
- Runtime Assertion: NO

2.6 Simulator Interface Issues

2.6.1 SD-001

- Interface Message:

Simple Simulator Not Initialized

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.6.2 SD-015

- Interface Message:

No V1_Neuron created

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.6.3 SD-016

- Interface Message:

No MT_Neuron created

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.6.4 SD-021

- Interface Message:

Invalid timing for eternal excitation

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.6.5 SD-025

- Interface Message:

Unordered external excitation phase insertion attempt

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.6.6 SD-027

- Interface Message:

First diffusion phase should be always zero

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.6.7 SD-028

- Interface Message:

The number of steps for simulate needs to be at least 1

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.6.8 SD-033

- Interface Message:

Trying to access an invalid activation TimeStep

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.6.9 SD-036

- Interface Message:

Setting not recognized

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.6.10 SD-037

- Interface Message:

Setting required

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.7 Warnings

2.7.1 WN-006

- Interface Message:

There are undocumented calculations in use

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: NO

2.8 Deprecated Messages

2.8.1 WN-001

- Interface Message:

Undocumented RFSIZE Calculation

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: NO

2.8.2 WN-002

- Interface Message:

Undocumented Sigma Calculation

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: NO

2.8.3 WN-003

- Interface Message:

Undocumented AdaptedWeithg Calculation

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: NO

2.8.4 WN-004

- Interface Message:

Undocumented AdaptedWeight correction

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: NO

2.8.5 WN-005

- Interface Message:

Undocumented BaseWeight correction

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: NO

2.8.6 SD-023

- Interface Message:

Invalid Parameter

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.8.7 SD-020

- Interface Message:

V1V1_default_weight is required for calculation

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.8.8 SD-010

- Interface Message:

V1MT_sigma is required for calculation

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.8.9 SD-011

- Interface Message:

V1MT_amplification is required for calculation

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.8.10 SD-012

- Interface Message:

V1MT_modulation is required for calculation

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.8.11 SD-013

- Interface Message:

V1MT_aperture is required for calculation

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.8.12 SD-004

- Interface Message:

V1_D001_excitatory_factor is required for calculation

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.8.13 SD-005

- Interface Message:

V1_D001_conductance_leak is required for calculation

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.8.14 SD-006

- Interface Message:

V1_D001_inhibition_factor is required for calculation

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.8.15 SD-019

- Interface Message:

V1V1_base_weight_source not recognized

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.8.16 SD-002

- Interface Message:

V1V1_weight_adaptation not recognized

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.8.17 SD-009

- Interface Message:

V1_dac_method not recognized

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.8.18 SD-034

- Interface Message:

V1_act_method not recognized

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.8.19 SD-035

- Interface Message:

V1_external_excitation_method not recognized

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.8.20 SD-003

- Interface Message:

MT_act_method not recognized

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.8.21 SD-007

- Interface Message:

V1MT_connection_method not recognized

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.8.22 SD-017

- Interface Message:

MT_act_method not recognized

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

2.8.23 SD-018

- Interface Message:

MT_dac_method not recognized

- Development Assertion: NO
- Implementation Assertion: NO
- Runtime Assertion: YES

Appendix A

First Appendix