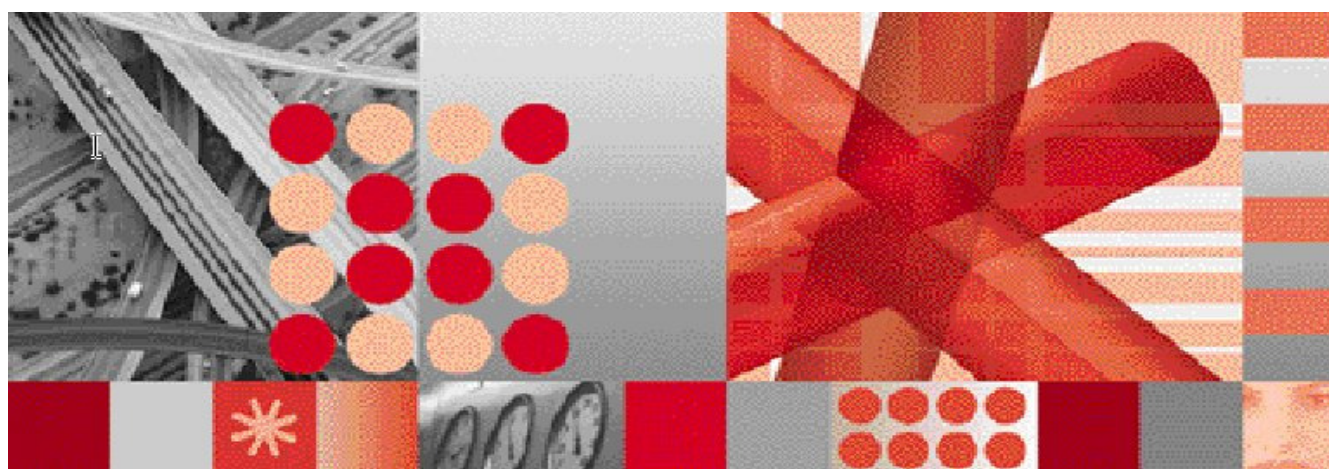




Version 3.4.0



Nokia ASCII Gateway Distribution Note

**TIVOLI® NETCOOL® PERFORMANCE MANAGER FOR WIRELESS
NOKIA ASCII GATEWAY DISTRIBUTION NOTE**

Note: Before using this information and the product it supports, read the information in
Notices on page 10.

This edition applies to Version 4.1 of IBM® Tivoli® Netcool® Performance Manager for Wireless and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright International Business Machines Corporation, 2008. All rights reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Table of Contents

1	About this Documentation	1
1.1	Audience.....	1
1.2	Required Skills and Knowledge	1
2	Associated Documents	2
2.1	Referenced Documents.....	2
2.2	Other Related Documents	2
3	Introduction	3
3.1	Operating System Support	3
3.2	Perl Version	3
3.3	Gateway Framework	3
4	Release History.....	4
4.1	Release 3.4.0.1	4
4.2	Release 3.4.0.....	4
4.3	Release 3.3.1.....	4
4.4	Release 3.3.0.....	5
4.5	Release 3.0.0.....	5
4.6	Release 2.4.0.....	5
4.7	Release 2.3.0.....	6
4.8	Release 2.2.1	7
4.9	Release 2.2.0.....	7
4.10	Initial Release 2.1.0.....	7
5	Type(s) and release(s) supported	8
5.1	Raw input files.....	8
5.2	Hierarchy input files.....	9
Appendix A	Notices and Trademarks.....	10

1 About this Documentation

1.1 Audience

The target audience of this document is IBM Performance Manager for Wireless customers. They should be familiar with telecommunication and IT principles and should also have a good understanding of Solaris.

IMPORTANT: Before attempting an installation of Performance Manager for Wireless you are strongly advised to read the release notes and any readme files distributed with your Performance Manager for Wireless software. Readme files and release notes may contain information specific to your installation not contained in this guide. Failure to consult readme files and release notes may result in a corrupt, incomplete or failed installation.

Note: Performance Manager for Wireless Administrators should not, without prior consultation and agreement from IBM, make any changes to the Index Organized tables or database schema. Changes to the Index Organized tables or database schema may result in corruption of data and failure of the Performance Manager for Wireless System. This applies to all releases of Performance Manager for Wireless using all versions of interfaces.

1.2 Required Skills and Knowledge

This guide assumes you are familiar with the following:

- General IT Principles
- Sun Solaris Operating System
- Oracle Database
- Windows operating systems
- Graphical User Interfaces
- Network Operator's OSS and BSS systems architecture

This guide also assumes that you are familiar with your company's network and with procedures for configuring, monitoring, and solving problems on your network.

2 Associated Documents

The following documentation accompanies this release:

2.1 Referenced Documents

Document Name	Document Description
[Install Note]	This document describes the steps required to install and run a Gateway.
[Gateway Framework Distribution Note]	This document provides an overview of the release history of the common modules.

2.2 Other Related Documents

Document Name	Document Description
[Nokia ASCII User Guide]	This document describes the vendor specific information on the Nokia Gateway.

3 Introduction

You should read this Distribution Note before proceeding to install the Gateway Configuration.

For information on the Gateway Framework, its configuration and use refer to the [Gateway Framework User Guide].

The Gateway Framework and Vendor Gateway are supplied as separate packages. As part of the Vendor Gateway installation process, it must reference a Gateway Framework installation. This separation simplifies the maintenance and version control of multiple vendor Gateway installations on a single server.

This Distribution Note provides an overview of the release history of the Gateway Configuration.

3.1 Operating System Support

The Vendor Gateway is built using the generic Gateway Framework. The Vendor Gateway is currently supported on the platforms as in the Gateway Framework Distribution Note.

3.2 Perl Version

The Vendor Gateway supports Perl version 5.6.1.

3.3 Gateway Framework

The Vendor Gateway requires the Gateway Framework release 3.4 and above.

See [Gateway Framework Distribution Note].

The Gateway Framework and Vendor Gateway release and installation have been decoupled into separate packages and procedures.

See [Install Note].

4 Release History

4.1 Release 3.4.0.1

Fix Patch Release date 30 June 2008.

Listed below are the bugs fixed in this release.

Bug#	Description
59108	Nokia Ascii parser creates multiple pifs when previous parsed file's hierarchy data not found.
59127	Missing counter in between, caused parser to skip some data block in raw data.

4.2 Release 3.4.0

Release date 29 January 2008.

Listed below are the enhancements to this release.

#	Description
1	Support Gateway Framework 3.4.0

4.3 Release 3.3.1

Release date 1 November 2007.

The table below lists the enhancements in this release:

Enhancement #	Description
1	Include modules directory for Vendor Gateways
2	Enhancements for HEADER_DATA_RECORD_PROCESSING to allow changes to block names within EngineConfig

Note:

The VENDOR_GATEWAY environment variable must be set to include the modules directory in the path before running Gateway, e.g.:

```
VENDOR_GATEWAY=${GATEWAY_ROOT}/modules/nokia-ascii
```


4.4 Release 3.3.0

Release date August 16th 2007.

Listed below are the bugs fixed in this release.

Bug#	Description
49775	Missing counter in between ,; caused parser to skip some data block in raw data.
56697	Nokia ASCII parser unable generate P_MSC_HO block
56723	Error messages in log file when parsing the files through Nokia_ASCII Gateway

Listed below are the enhancements in this release.

Enhancement#	Description
35886	Nokia parser needs rework to normalise DLCI data
44509	DLCI enhancement
57222	NOKIA Ascii rule only takes "null" as the NULL representation in the rawdata file

4.5 Release 3.0.0

Release date August 20th 2004.

Listed below are the bugs fixed in this release.

Bug#	Description
35857, 36749	Gateway is now able to process multiple raw files.
35906, 43205	Gateway is now processing raw files in drip feed mode properly.
35888	Double quotes are added to the string (begins with non-alphanumeric characters) correctly.
35863	Measurement 840 is now configured correctly in Nokia BSS Config.
43206	Gateway is now generating a new PIF file if total number of counters in a specific measurement changed.
43177	Gateway is now generating PIF files using HEADER_INFO_FOR_PIF_FILENAME as key.

Listed below are the enhancements included in this release

Enhancement#	Description
1	Version upgrade to 3.0.0
38911	Support measurement type 93 and 94 to Nokia BSS Config.
43253	Support reading of hierarchy data from multiple files.

4.6 Release 2.4.0

Release date October 22nd 2003.

**TIVOLI® NETCOOL® PERFORMANCE MANAGER FOR WIRELESS
NOKIA ASCII GATEWAY DISTRIBUTION NOTE**

Listed below are the bugs fixed in this release.

Bug#	Description
32701	NODEID (BSCID) included in every block in the LIF file
33110	NULL counter values cause problems with loader
33138	NSS part create all data with blocks called either MSC or HLR
33140	PIF Filenames contain starttime, inefficient in a backlog situation
33151	MSC batch rule configured incorrectly.
33156	Parser should handle compressed files.
35736	Hierarchy data configuration can cause clashes/incorrect lookups.
37737	Failure of object ID lookup on first line of raw file not handled correctly.
35738	Blank configuration line that doesn't affect lookups not handled correctly.
35739	PIF files containing header data only should not be produced.
35740	Adjacent cell mapping not handled correctly
35741	The month mapping function contains formatting errors.

Listed below are the enhancements included in this release

Enhancement#	Description
35742	Support for counter manipulation options during engine stage.
1	Enhance FILE_SPLIT rule to support counter ordering
2	Add Post Parser rule for counter value calculations
3	Add support for counter manipulation on a per OM type configuration.

4.7 Release 2.3.0

Release date June 27 2003.

Listed below are the bugs to be fixed in this release.

Bug#	Description
33147	New functionality to redirect network configuration data to the header block .
32701	Same requirement as 33147
33110	a new DEFAULT_NULL_VALUE to replace null's found in performance or configuration data.
33111	Counter values with spaces now enclosed in quotes.
33138	The OUTPUT_BLOCK_NAME has been removed from the MSC and HLR batch rule instances.
33140	NODEID is included as a token when creating the PIF filename, now that its contained in the header.

**TIVOLI® NETCOOL® PERFORMANCE MANAGER FOR WIRELESS
NOKIA ASCII GATEWAY DISTRIBUTION NOTE**

33142	Extra level of indirection to access the OM types.
33156	Compressed files now handled correctly using GenUtils::file_open to open PM files in engine module.
33151	MSC batch rule is configured wrongly
33155	MSC and HLR batch rule is missing DAY and NODEID in output filename

4.8 Release 2.2.1

Release date February 2003.

The bugs fixed are listed in the table below.

Bug #	Description
31730	Decimal numbers for counter values are truncated
31762	Missing OM Types in NSS and BSS configuration
31770	Post Parsing Rules are inadequate
31931	Missing Hierarchy in LIFs, make the insertion of rows with missing hierarchy data configurable.

The enhancements are listed in the table below.

Enhancement #	Description
1	Add support for Nokia MML report output. This release supports the parsing of text based MML reports from GPRS and BSS nodes.

4.9 Release 2.2.0

Release date December 2002.

This release contains the following:

- New framework functionality for the collection of statistics on file and block processing
- A number of fixes to bugs in common-modules.

4.10 Initial Release 2.1.0

Release Date September 2002.

This is the first release of the Nokia ASCII Gateway. Refer to the Requirements Specification for more details. It meets the requirements for the handling of Nokia BSS, NSS and SGSN data.

5 Type(s) and release(s) supported

The Gateway has been tested for:

Vendor Performance data	Type	Release
Nokia ASCII	BSS	S11.5, T12, OSS3.1
Nokia ASCII	NSS	T12, OSS3.1
Nokia ASCII	SGSN	T12, OSS3.1
Nokia ASCII	SGSN	R2
Nokia ASCII	BSC and SGSN MML report output	N/A

5.1 Raw input files

2 distinct types of raw files are supported, the standard Nokia ASCII format, and text based reported generated via Nokia MML request strings.

Scope	Attendant Format/Syntax
Performance Measurement File Types	NSS/BSS/SGSN
Input file names to expect	There are 3 subtypes of files expected: BSS - BSC<ID>.<measurement type>.<datetime>.<unique temp id> e.g BSC49573.71.200207180000.411485 NSS – NSS.<unique id>.<date>.<time> NSS.tbq302.07Aug02.13:57:12 SGSN – SGSN.<unique id>.<date>.<time> e.g. SGSN.tbq302.07Aug02.14:43:58
Equipment/devices to expect data from	BSS/NSS/SGSN nodes
Extraction mechanism	Database scripts

Scope	Attendant Format/Syntax
-------	-------------------------

TIVOLI® NETCOOL® PERFORMANCE MANAGER FOR WIRELESS
NOKIA ASCII GATEWAY DISTRIBUTION NOTE

MML report output	MML line report format, which can be broken into a file header, and a number of report blocks, each of which contains a report header and report detail lines.
Input file names to expect	<MML_COMMAND>_<OBJECT>_<YYYYMMDD>.<HHMM>.mml For example for BSC: ZFWO_10-71-0001_20030217.1302.mml And for SGSN: ZEJL_SGSN01_20030217.1302.mml
Equipment/devices to expect data from	BSS/SGSN nodes
Extraction mechanism	MML request strings.

5.2 Hierarchy input files

Scope	Attended Format/Syntax
Input files names to expect	The four hierarchy files expected are: hierarchy.dat trxhier.dat objects.dat sgsn.dat
Input file formats to expect	ASCII
Equipment/devices to expect data	BSS/NSS/SGSN nodes
Extraction mechanism	Database script
Transfer mechanism	N/A

Appendix A Notices and Trademarks

This appendix contains the following:

- Notices
- Trademarks

Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk NY 10504-1785
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

IBM World Trade Asia Corporation
Licensing
2-31 Roppongi 3-chome
Minato-ku
Tokyo 106-0032
Japan.

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

**TIVOLI® NETCOOL® PERFORMANCE MANAGER FOR WIRELESS
NOKIA ASCII GATEWAY DISTRIBUTION NOTE**

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation
5300 Cork Airport Business Park
Kinsale Road
Cork
Ireland.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Trademarks

IBM, IBM logo, Tivoli, and Netcool are trademarks of International Business Machines Corporation in the United States, other countries or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Intel and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Other company, product or service names may be trademarks or service marks of others.

IBM

© Copyright IBM Corporation 2008

International Business Machines Corporation
5300 Cork Airport
Business Park
Kinsale Road
Cork
Ireland

Printed in the Republic of Ireland
All Rights Reserved
IBM, IBM logo, Tivoli, and Netcool are trademarks
of International Business Machines Corporation in
the United States, other countries or both.

Other company, product and service names may
be trademarks or service marks of others.