

# **Wireless Data Server 2.1**

## **Administrator's Guide**

---

## **Wireless Data Server 2.1 Administrator's Guide**

July 2001

### **Copyright 2001 Steltor Inc. All rights reserved**

No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form by any means without the express written permission of Steltor.

### **Software License Notice**

Your license agreement with Steltor, which is included with the product, specifies the permitted and prohibited use of the product. Any unauthorized duplication or use of Wireless Data Server, in whole or in part, in print, or any other storage and retrieval system, is forbidden.

### **Trademarks**

All product or brand names are trademarks or registered trademarks of their respective holders.

### **Notice**

Steltor makes no expressed or implied warranty with regard to the programs and materials offered or their salability or their fitness for any particular purpose.

The program, materials, and documentation are made available solely on an "as is" basis, and the entire risk as to their quality, reliability, and performance is with the user. Should the program material or documentation prove defective, the user (not Steltor, or any other party) shall bear the entire cost of all necessary correction and all incidental or consequential damages. Steltor shall not be liable for any incidental or consequential damages in connection with or arising out of the furnishing, use, or performance of the supplied material.

Steltor Inc.  
2000 Peel Street, 4th Floor  
Montreal, QC  
CANADA  
H3A 2W5

tel: (514) 733-8500  
fax: (514) 733-8878  
e-mail: [info@steltor.com](mailto:info@steltor.com)

# Contents

<b>Introduction .....</b>	<b>5</b>
Conventions used in this manual .....	5
System Requirements .....	6
<b>Chapter 1 • Architecture .....</b>	<b>7</b>
Overview .....	7
Connecting to the calendar server .....	7
Mobile-originated messages .....	8
Mobile-terminated messages .....	8
Connecting to the wireless network.....	9
Data Circuit-terminating Equipment (DCE) .....	9
Short Message Peer to Peer (SMPP) .....	9
Universal Computer Protocol (UCP) .....	10
<b>Chapter 2 • Configuration .....</b>	<b>11</b>
Server configuration .....	11
Configuration parameters .....	11
<b>Chapter 3 • Administration .....</b>	<b>35</b>
System maintenance.....	35
System monitoring .....	36



---

# Introduction

---

Wireless Data Server is a configurable extension to Lexacom Calendar Server, Lexacom Enterprise Calendar Server, or CorporateTime Server. It provides the capability to send calendar notification as text, calendar note, or both, to a mobile device over the Global System for Mobile Communications (GSM) network, *via* Short Message Service (SMS). With Wireless Data Server, calendar users can create new appointments and receive agenda updates and reminders when on the road or away from their desks.

## Conventions used in this manual

- |                              |  |
|------------------------------|--|
| <code>Monospaced font</code> | This typeface is used for any text that appears on the computer or mobile device screen, or text that you should type. It's also used for file and path names and functions.   |
| <b>Boldface</b>              | Boldface type is used for button names and form elements such as input areas and check boxes.  |
| <i>Italic</i>                | Italic type is used for emphasis, book titles, and glossary terms.   |
| [ ]                          | Square brackets enclose commands that are optional. That is, you can omit any text that appears in square brackets.  |
| <>                           | Angle brackets enclose variables. When following examples, replace the angle brackets and their text with text that applies to your situation. For example, when path names appear in angle brackets, substitute the path names used on your computer. |
| /                            | Forward slashes separate directories in a path following UNIX syntax. For Windows operating systems, replace the forward slashes with back slashes (\).  |

**UNIX** Marks text that applies only to UNIX versions of Wireless Data Server.

**NT** Marks text that applies only to Windows NT versions of Wireless Data Server.

## System Requirements

- One of the following operating systems:
  - Windows NT 4.0, with Service Pack 5 (Service Pack 6 not currently supported)
  - Windows 2000
  - HP-UX 10.20
  - Solaris 2.6, 7 or 8
- 64 Mb RAM or greater
- 100 Mb disk space or greater

**NOTE** These base requirements are subject to change depending on deployment.

# 1

## Architecture

This chapter offers a general description of Wireless Data Server's architecture, including its interactions with the calendar server and three possible setups for connecting to the wireless network.

- “Overview” on page 7
- “Connecting to the calendar server” on page 7
- “Data Circuit-terminating Equipment (DCE)” on page 9
- “Short Message Peer to Peer (SMPP)” on page 9
- “Universal Computer Protocol (UCP)” on page 10

### Overview

Wireless Data Server is an intermediary between the calendar server and the mobile network. It translates and transmits data bi-directionally, “pulling” desired information from the calendar database, and “pushing” configurable reminders and notifications to the phone. It consists of three components: the server core, the `smsnotify` utility, and any one of a variety of plug-ins for connecting to the Short Message Service Center (SMSC). The functions of these components are described in more detail below.

### Connecting to the calendar server

This section describes the two kinds of interactions between Wireless Data Server and calendar server: those that occur when a message originating from the mobile phone is sent through Wireless Data Server to the calendar server, and those that occur when a reminder or notification is sent from the calendar server through Wireless Data Server to the mobile phone.

## Mobile-originated messages

When you start Wireless Data Server, it establishes a persistent connection to each node of each calendar server specified in `wds.ini` (see the [`<UNISON>`] section). It logs in as `SYSOP` for all nodes, using the encrypted passwords you set in `wds.ini` (consult the readme file for details on this procedure).

When Wireless Data Server receives a short message from the wireless network, it interprets the message and translates it into a syntax understood by the calendar server. Wireless Data Server then passes the request on to the calendar server, identifying the sender by the MSISDN of his or her phone. The calendar server handles its requests in exactly the same way as it handles any other client connection. For more information, please see your calendar server's Administrator's Guide.

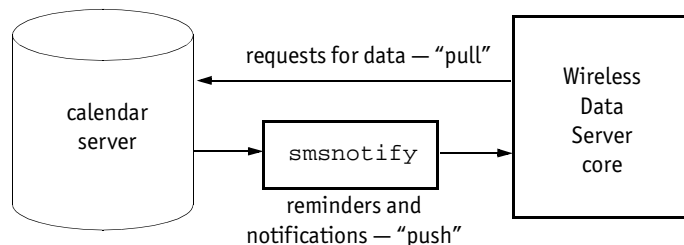
**NOTE** Because users are identified by their phone's MSISDN when making requests through Wireless Data Server, each user must have a unique MSISDN.

## Mobile-terminated messages

When the calendar server sends a reminder or notification to a wireless handset, it follows a process similar to that for e-mail notifications, calling an external application for delivery of the calendar information. For wireless reminders and notification, the calendar server calls the `smsnotify` utility from the `/users/unison/bin` directory. This program passes the calendar information *via* SMTP to Wireless Data Server. Wireless Data Server then reformats the information and sends it by SMS over the wireless network to the mobile phone.

The model of Wireless Data Server's connection to the calendar server can be summarized as follows:

Figure 1.1 • WDS / calendar server interactions

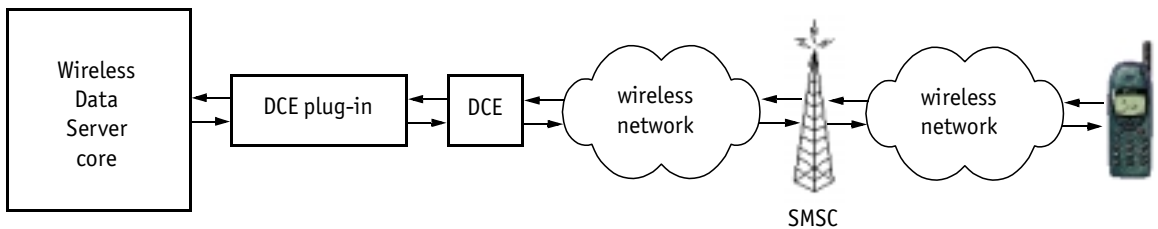


# Connecting to the wireless network

## Data Circuit-terminating Equipment (DCE)

Wireless Data Server can connect to the wireless network through a modem, using the Data Circuit-terminating Equipment (DCE) plug-in. This plug-in is provided along with the Wireless Data Server core. The modem and Short Message Service Center (SMSC) communicate over the wireless network.

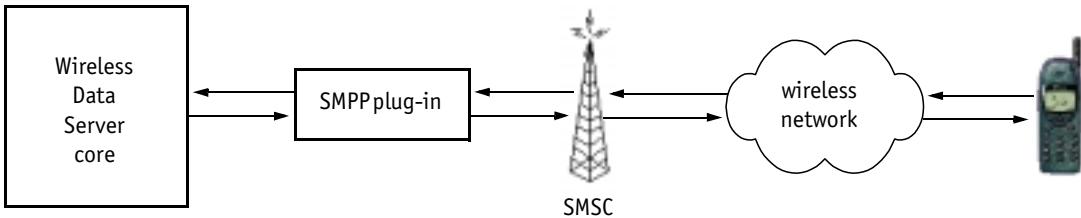
Figure 1.2 • DCE installation



## Short Message Peer to Peer (SMPP)

In this implementation, Wireless Data Server connects directly to the SMSC using the Short Message Peer to Peer (SMPP) protocol, through its SMPP plug-in.

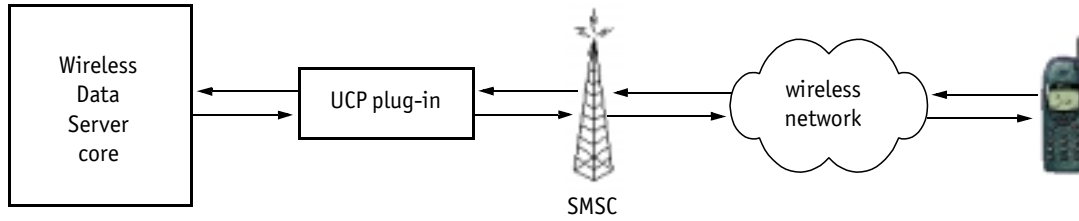
Figure 1.3 • SMPP installation



## Universal Computer Protocol (UCP)

In this implementation, Wireless Data Server connects directly to the SMSC using the Universal Computer Protocol (UCP), through its UCP plug-in.

Figure 1.4 • UCP installation



# 2

## Configuration

This chapter describes in detail the configurable parameters controlling the operation of Wireless Data Server.

- “Server configuration” on page 11
  - Configuration parameters
  - Common Parameters
  - Installation-specific parameters

### Server configuration

The administrator can control and define server behaviour using configurable parameters located in the `/etc/config/wds.ini` file. These parameters should be reviewed and tuned on a per installation basis. In addition, certain parameters in the `/users/unison/misc/unison.ini` must be modified. Consult the product Readme file for details.

The stated default values are not necessarily the optimal settings for your installation. It is strongly recommended that for reference purposes you keep a copy, in either printed or electronic format, of this file before modification.

**NOTE** When a parameter is not supplied, the default value is automatically assumed.

### Configuration parameters

The following table lists all parameters by section. The sections, as well as the individual parameters within each section, are listed in alphabetical order. Use this table to look up a parameter, get a brief description of what it does, and determine what page it is on.

Table 2.1 • Server configuration parameters

Section	Parameter	Description	Page
[ <DCE> ]	debug	Debug mode	22
	errlog	Error logging	23
	logfile	Log file name	23
	msisdn	Wireless Data Server's MSISDN number	24
	port	DCE serial port	23
	smscmsisdn	SMSC MSISDN	24
	smsmode	DCE SMS mode	24
	speed	DCE connection data rate	25
	stats	Stats mode	25
	trace	Trace mode	25
[ LIC ]	license	Product license	14
[ <SMPP> ]	enquirelink	ENQUIRE_LINK operation	26
	enquirelink_timeinterval	Interval between ENQUIRE_LINK operations	26
	host	SMSC IP address	26
	msisdn	Wireless Data Server's MSISDN number	27
	msisdnmpi	MSISDN numbering plan indicator	27
	msisdnton	MSISDN number type	27
	passwd	Password	27
	port	SMSC port number	28
	systemid	System ID	28
	systemtype	System type	28
	throttle_smsmsgburst	Committed burst size	29
	throttle_smsmsgrate	Committed information rate	29
throttle_timeinterval	Committed rate measurement interval	30	
[ <UCP> ]	confile	Location of UCP configuration file	31
	dcs	Wireless Data Server data coding scheme	32
	host	SMSC address	30
	localhost	Local WDS host address	31
	msisdn	Wireless Data Server MSISDN	31
	msisdntoa	Wireless Data Server's type of address	32
	port	SMSC port number	30
	throttle_smsmsgburst	Committed burst size	32

Table 2.1 • Server configuration parameters

Section	Parameter	Description	Page
	<code>throttle_smsmsgrate</code>	Committed information rate	33
	<code>throttle_timeinterval</code>	Committed rate measurement interval	33
[ <UNISON> ]	<code>host</code>	Calendar server host name	21
	<code>node</code>	Calendar server node-ID	21
	<code>passwd</code>	Calendar server SysOp password	22
[ WDS ]	<code>blockedmsisdns</code>	Blocked MSISDN numbers	14
	<code>buffertranslog</code>	Transaction log buffering	16
	<code>confirmcalevents</code>	Accept and decline new meetings	21
	<code>debug</code>	Debug mode	15
	<code>msgrefnum</code>	Message reference number	15
	<code>nbsrefnum</code>	Narrowband Socket datagram reference number	16
	<code>port</code>	Wireless Data Server port	17
	<code>smscharset</code>	Character set used by the SMSC connection	17
	<code>smsconnections</code>	Section name(s) of all SMSC connections	17
	<code>smscplugin</code>	SMSC plug-in	18
	<code>smtmsgdir</code>	SMTP message storage directory	18
	<code>summaryminsize</code>	Minimum vCalendar summary size	18
	<code>trace</code>	Trace mode	19
	<code>transid</code>	Transaction reference number	16
	<code>translogbuffersize</code>	Transaction log buffer size	17
	<code>unisoncachesize</code>	Cache size	19
	<code>unisonconnections</code>	Section name(s) of all calendar server connections	19
	<code>userepeatsymbol</code>	Repeat symbol	20
	<code>wreqmsgdir</code>	Incoming request storage directory	20
	<code>wreqvalidityperiod</code>	Expiry time limit	20

The following parameter descriptions are divided into common and installation-specific sections.

**NOTE A word about section names**

All section names enclosed in angle-brackets are variables. They should be changed according to the setup of your system. For example, the section referred to throughout this text as [ <UNISON> ] could have any name. Similarly, the [ <DCE> ] or [ <SMPP> ] sections should be renamed according to your preference.

For each section, choose a name descriptive of the connection it configures. For example, to set up connections to node 144 and 145 of a calendar server named "Scribe", you would have two [ <UNISON> ] sections, perhaps titled [ SCRIBE\_144 ] and [ SCRIBE\_145 ] respectively. Whatever names you choose, however, be sure to specify them using the [ WDS ] `smconnection` and `unisonconnections` parameters.

## Common Parameters

The following parameters, in the [ LIC ], [ WDS ] and [ <UNISON> ] sections, apply to all installations of Wireless Data Server, regardless of the plug-in used to connect to the wireless network.

### Product license

<b>Section</b>	[ LIC ]
<b>Parameter</b>	<code>license</code>
<b>Description</b>	Your confidential license key, provided by your Stelcor representative. Do not change the value of this parameter without explicit instructions from technical support personnel.
<b>Accepted values</b>	N/A
<b>Default value</b>	None

### Blocked MSISDN numbers

<b>Section</b>	[ WDS ]
<b>Parameter</b>	<code>blockedmsisdns</code>

<b>Description</b>	A list of MSISDN numbers to which Wireless Data Server will not send SMS messages.
<b>Accepted values</b>	A list of valid MSISDN numbers, separated by commas and enclosed in {}. For example:  <pre>{+15145551234, +15145556789}</pre> <p>Please note: this list should always contain the MSISDN numbers of all Wireless Data Server gateways to avoid the possibility of a circular loop.</p>
<b>Default value</b>	{ }
<b>Debug mode</b>	
<b>Section</b>	[WDS]
<b>Parameter</b>	debug
<b>Description</b>	Logs input/output data in <code>wds.log</code> .
<b>Accepted values</b>	TRUE (Debug mode on) FALSE (Debug mode off)
<b>Default value</b>	FALSE
<b>Message reference number</b>	
<b>Section</b>	[WDS]
<b>Parameter</b>	msgrefnum
<b>Description</b>	A reference number for the transmission of request, notification and system messages. Wireless Data Server increments this value automatically. Do not change the value of this parameter without explicit instructions from technical support personnel.
<b>Accepted values</b>	A positive integer.
<b>Default value</b>	0

## Narrowband Socket datagram reference number

<b>Section</b>	[WDS]
<b>Parameter</b>	<code>nbsrefnum</code>
<b>Description</b>	A reference number for the transmission of Narrowband Socket datagrams. Wireless Data Server increments this value automatically. Do not change the value of this parameter without explicit instructions from technical support personnel.
<b>Accepted values</b>	A positive integer.
<b>Default value</b>	0

## Transaction reference number

<b>Section</b>	[WDS]
<b>Parameter</b>	<code>transid</code>
<b>Description</b>	A reference number for Wireless Data Server transactions. Wireless Data Server increments this value automatically. Do not change the value of this parameter without explicit instructions from technical support personnel.
<b>Accepted values</b>	A positive integer.
<b>Default value</b>	1

## Transaction log buffering

<b>Section</b>	[WDS]
<b>Parameter</b>	<code>buffertranslog</code>
<b>Description</b>	Determines whether or not to buffer transactions in memory before writing them to the transaction log in order to improve performance. See also [WDS] <code>translogbuffersize</code> .
<b>Accepted values</b>	TRUE (buffer transactions) FALSE (write transactions directly to the log)
<b>Default value</b>	FALSE

## Transaction log buffer size

<b>Section</b>	[WDS]
<b>Parameter</b>	translogbuffersize
<b>Description</b>	Determines the number of transactions Wireless Data Server will buffer before recording them in the transaction log. See also [WDS] translogbuffersize.
<b>Accepted values</b>	A positive integer
<b>Default value</b>	10

## Wireless Data Server port

<b>Section</b>	[WDS]
<b>Parameter</b>	port
<b>Description</b>	Specifies the port used by Wireless Data Server.
<b>Accepted values</b>	Any valid port number.
<b>Default value</b>	4573

## Character set used by the SMSC connection

<b>Section</b>	[WDS]
<b>Parameter</b>	smscharset
<b>Description</b>	Specifies the character set used by the SMSC connection. Please see the readme file provided with your installation for instructions on setting this parameter.
<b>Accepted values</b>	Any valid character set.
<b>Default value</b>	None

## Section name(s) of all SMSC connections

<b>Section</b>	[WDS]
<b>Parameter</b>	smsconnections

<b>Description</b>	A list of section names for all SMSC connections configured in <code>wds.ini</code> .
<b>Accepted values</b>	A list of strings, enclosed in curly braces and separated by commas. For example: { CONNECT1, CONNECT2 }
<b>Default value</b>	{ }

### SMSC plug-in

<b>Section</b>	[WDS]
<b>Parameter</b>	<code>smscplugin</code>
<b>Description</b>	Specifies the plug-in for Wireless Data Server to use to connect to the SMS Centre. Set this parameter according to your installation type, as instructed in the Readme.
<b>Accepted values</b>	<code>/wds/bin/smscdce.dll</code> (for DCE connections only) <code>/wds/bin/smsccgw.dll</code> (for SONERA-CGW connections only) <code>/wds/bin/smscsmpp.dll</code> (for SMPP connections only) <code>/wds/bin/smscucp.dll</code> (for UCP connections only)
<b>Default value</b>	None

### SMTP message storage directory

<b>Section</b>	[WDS]
<b>Parameter</b>	<code>smtpmsgdir</code>
<b>Description</b>	The subdirectory in which Wireless Data Server stores incoming SMTP messages. The specified directory will be created within Wireless Data Server's <code>db</code> directory (e.g. <code>/wds/db</code> ).
<b>Accepted values</b>	Any valid directory name.
<b>Default value</b>	<code>.</code> ( <code>db</code> directory itself, e.g. <code>/wds/db</code> )

### Minimum vCalendar summary size

<b>Section</b>	[WDS]
<b>Parameter</b>	<code>summaryminsize</code>

**Description** Specifies the minimum size for the vCalendar SUMMARY property (Nokia 61xx only). Do not change the value of this parameter without explicit instructions from technical support personnel.

**Accepted values** A positive integer.

**Default value** 15

### Trace mode

**Section** [WDS]

**Parameter** trace

**Description** Prints every function call Wireless Data Server makes to `wds.log`.

**Accepted values** TRUE (Trace mode on)  
FALSE (Trace mode off)

**Default value** FALSE

### Cache size

**Section** [WDS]

**Parameter** unisoncachesize

**Description** Specifies the maximum number of users for whom to store information in memory.

**Accepted values** A positive integer.

**Default value** 100

### Section name(s) of all calendar server connections

**Section** [WDS]

**Parameter** unisonconnections

**Description** A list of section names for all calendar server connections configured in `wds.ini`.

**Accepted values** A list of strings, enclosed in curly braces and separated by commas. For example:

```
{ SCRIBE, CLIO }
```

**Default value** { }

## Repeat symbol

**Section** [WDS]

**Parameter** userepeatsymbol

**Description** Allows the use of the repeat symbol ("R") to designate repeating events, instead of sending multiple SMS messages. The value of this parameter only affects phones set to receive events as vCalendar objects. Text messages will always use the repeat symbol.

**Accepted values** TRUE (Repeat symbol enabled)  
FALSE (Repeat symbol disabled)

**Default value** TRUE

## Incoming request storage directory

**Section** [WDS]

**Parameter** wreqmsgdir

**Description** The subdirectory in which Wireless Data Server stores incoming messages from the SMS Centre. The specified directory will be created within Wireless Data Server's db directory (e.g. /wds/db).

**Accepted values** Any valid directory name.

**Default value** . (db directory itself, e.g. /wds/db)

## Expiry time limit

**Section** [WDS]

**Parameter** wreqvalidityperiod

**Description** Specifies the length of time in hours before unprocessed wireless requests expire.

**Accepted values** A positive integer.

**Default value** 2

## Accept and decline new meetings

**Section** [WDS]

**Parameter** `confirmcalevents`

**Description** Specifies whether or not users can accept and decline new meetings by replying to notification messages. See the Wireless Data Server User's Guide for more details.

**Accepted values** TRUE (Users can accept or decline)  
FALSE (No option to accept or decline)

**Default value** FALSE

## Calendar server host name

**Section** [ <UNISON> ]

**Parameter** `host`

**Description** The name of the calendar server's host.

**Accepted values** Any valid host name.

**Default value** None

## Calendar server node-ID

**Section** [ <UNISON> ]

**Parameter** `node`

**Description** A node-ID on the calendar server specified by the [ <UNISON> ] `host` parameter.

**Accepted values** Any valid node-ID.

**Default value** None

## Calendar server SysOp password

<b>Section</b>	[ <UNISON> ]
<b>Parameter</b>	passwd
<b>Description</b>	Encrypted SysOp password for the calendar server node specified by the <code>node</code> parameter in this [ <UNISON> ] section. Run <code>cspasswd.exe</code> to set this parameter for each [ <UNISON> ] section in <code>wds.ini</code> . For more information on using <code>cspasswd.exe</code> , consult the Readme file provided to you with Wireless Data Server.
<b>Accepted values</b>	Alphanumeric string. For example:  3d747b104e0d087f4d
<b>Default value</b>	None
<b>Default value</b>	None

## Installation-specific parameters

This section describes the parameters used in the [ <DCE> ], [ <SONERA-CGW> ] and [ <SMPP> ] sections. Please see “A word about section names” on page 14.

### Debug mode

<b>Section</b>	[ <DCE> ]
<b>Parameter</b>	debug
<b>Description</b>	Logs input/output data in <code>wds.log</code> and/or the file specified by the [ <DCE> ] <code>logfile</code> parameter. Supercedes the [ WDS ] <code>debug</code> parameter for the connection configured in this [ <DCE> ] section.
<b>Accepted values</b>	TRUE (Debug mode on) FALSE (Debug mode off)
<b>Default value</b>	FALSE

## Error logging

<b>Section</b>	[ <DCE> ]
<b>Parameter</b>	errlog
<b>Description</b>	Forces the logging of all errors to <code>wds.log</code> and/or the file specified by the [ <DCE> ] <code>logfile</code> parameter. Unexpected errors are always logged, regardless of this parameter.
<b>Accepted values</b>	TRUE (Error logging on) FALSE (Error logging off)
<b>Default value</b>	FALSE

## Log file name

<b>Section</b>	[ <DCE> ]
<b>Parameter</b>	logfile
<b>Description</b>	Specifies a file for log messages concerning only the connection between Wireless Data Server and GSM modem. Wireless Data Server will still print its internal log messages to <code>wds.log</code> .
<b>Accepted values</b>	Any valid filename. Please note: Wireless Data Server will preface your filename with the default path of its log directory ( <code>/wds/log/</code> ).
<b>Default value</b>	If this parameter is left blank, Wireless Data Server will print all log messages to <code>wds.log</code> .

## DCE serial port

<b>Section</b>	[ <DCE> ]
<b>Parameter</b>	port
<b>Description</b>	Specifies the serial port to which the DCE is connected.
<b>Accepted values</b>	Any valid port.
<b>Default value</b>	COM1

## DCE SMS mode

<b>Section</b>	[ <DCE> ]
<b>Parameter</b>	smismode
<b>Description</b>	Specifies whether the DCE uses text or Protocol Data Unit (PDU) mode.  Note: If you set the value of this parameter to 1, you must set the value of the [ WDS ] <code>smisccharset</code> parameter to <code>MSCP437</code> . In this case, users with Nokia 71xx phones will not be able to create events using calendar notes.
<b>Accepted values</b>	0 (PDU) 1 (text)
<b>Default value</b>	0

## Wireless Data Server's MSISDN number

<b>Section</b>	[ <DCE> ]
<b>Parameter</b>	msisdn
<b>Description</b>	Wireless Data Server's MSISDN number.
<b>Accepted values</b>	Any valid MSISDN number.
<b>Default value</b>	None

## SMSC MSISDN

<b>Section</b>	[ <DCE> ]
<b>Parameter</b>	smcsmisdn
<b>Description</b>	Specifies the MSISDN number of the SMS Centre.
<b>Accepted values</b>	Any numeric string.
<b>Default value</b>	None

## DCE connection data rate

<b>Section</b>	[ <DCE> ]
<b>Parameter</b>	speed
<b>Description</b>	Specifies the data rate of transmissions to and from the DCE in bits per second (bps).
<b>Accepted values</b>	A positive integer.
<b>Default value</b>	19200

## Stats mode

<b>Section</b>	[ <DCE> ]
<b>Parameter</b>	stats
<b>Description</b>	Prints statistics concerning connection time and other information to <code>wds.log</code> and/or the file specified by the [ <DCE> ] <code>logfile</code> parameter. Supercedes the [WDS] <code>stats</code> parameter for the connection configured in this [ <DCE> ] section.
<b>Accepted values</b>	TRUE (Stats mode on) FALSE (Stats mode off)
<b>Default value</b>	FALSE

## Trace mode

<b>Section</b>	[ <DCE> ]
<b>Parameter</b>	trace
<b>Description</b>	Prints every function call Wireless Data Server makes to <code>wds.log</code> and/or the file specified by the [ <DCE> ] <code>logfile</code> parameter. Supercedes the [WDS] <code>trace</code> parameter for the connection configured in this [ <DCE> ] section.
<b>Accepted values</b>	TRUE (Trace mode on) FALSE (Trace mode off)
<b>Default value</b>	FALSE

## ENQUIRE\_LINK operation

<b>Section</b>	[ <SMPP> ]
<b>Parameter</b>	enquirelink
<b>Description</b>	Enables and disables ENQUIRE_LINK operations from Wireless Data Server to SMS Centre.
<b>Accepted values</b>	TRUE (Enables ENQUIRE_LINK) FALSE (Disables ENQUIRE_LINK)
<b>Default value</b>	TRUE

## Interval between ENQUIRE\_LINK operations

<b>Section</b>	[ <SMPP> ]
<b>Parameter</b>	enquirelink_timeinterval
<b>Description</b>	Time interval between successive ENQUIRE_LINK operations from Wireless Data Server to SMS Centre, in seconds.
<b>Accepted values</b>	Any integer.
<b>Default value</b>	2700 (45 minutes)

## SMSC IP address

<b>Section</b>	[ <SMPP> ]
<b>Parameter</b>	host
<b>Description</b>	The IP address of the SMS Centre.
<b>Accepted values</b>	Any correctly-formatted IP address. For example: 123 . 45 . 67 . 89
<b>Default value</b>	127 . 0 . 0 . 1

## Wireless Data Server's MSISDN number

<b>Section</b>	[ <SMPP> ]
<b>Parameter</b>	<code>msisdn</code>
<b>Description</b>	Wireless Data Server's MSISDN number.
<b>Accepted values</b>	Any valid MSISDN number.
<b>Default value</b>	None

## MSISDN numbering plan indicator

<b>Section</b>	[ <SMPP> ]
<b>Parameter</b>	<code>msisdnnpi</code>
<b>Description</b>	A number indicating Wireless Data Server's MSISDN numbering plan. For more information, please see GSM 03.40, 9.1.2.5.
<b>Accepted values</b>	An integer between 0 and 15 inclusive.
<b>Default value</b>	0

## MSISDN number type

<b>Section</b>	[ <SMPP> ]
<b>Parameter</b>	<code>msisdnton</code>
<b>Description</b>	Wireless Data Server's type of MSISDN number. For more information, please see GSM 03.40, 9.1.2.5.
<b>Accepted values</b>	An integer between 0 and 7 inclusive.
<b>Default value</b>	None

## Password

<b>Section</b>	[ <SMPP> ]
<b>Parameter</b>	<code>passwd</code>

**Description** Wireless Data Server's encrypted password. Please see the Readme file for instructions on using `cspasswd.exe` to set the value of this parameter.

**Accepted values** Alphanumeric string. For example:

3d747b104e0d087f4d

**Default value** None

### **SMSC port number**

**Section** [ <SMPP> ]

**Parameter** `port`

**Description** The port number of the SMS Centre.

**Accepted values** Any valid port number.

**Default value** 2775

### **System ID**

**Section** [ <SMPP> ]

**Parameter** `systemid`

**Description** Wireless Data Server's system identifier.

**Accepted values** Numeric string. For example:

8888888129

**Default value** None

### **System type**

**Section** [ <SMPP> ]

**Parameter** `systemtype`

**Description** Wireless Data Server's system type.

<b>Accepted values</b>	Any valid system type, or none.
<b>Default value</b>	None
<b>Committed burst size</b>	
<b>Section</b>	[<SMPP>]
<b>Parameter</b>	<code>throttle_smsmsgburst</code>
<b>Description</b>	The number of messages allowed by the SMS Centre in the time interval specified by the [<SMPP>] <code>throttle_timeinterval</code> parameter.
	Please note: configure only two of the three throttle parameters ( <code>throttle_timeinterval</code> , <code>throttle_smsmsgburst</code> , and <code>throttle_smsmsgrate</code> ). The third will be determined according to the following equation:
	$\text{timeinterval} = \text{smsmsgburst} / \text{smsmsgrate}$
<b>Accepted values</b>	Any integer.
<b>Default value</b>	0
<b>Committed information rate</b>	
<b>Section</b>	[<SMPP>]
<b>Parameter</b>	<code>throttle_smsmsgrate</code>
<b>Description</b>	The number of messages allowed by the SMS Centre over a given period of time. Specify the number of messages and time interval using the [<SMPP>] <code>throttle_smsmsgburst</code> and <code>throttle_timeinterval</code> parameters.
	Please note: configure only two of the three throttle parameters ( <code>throttle_timeinterval</code> , <code>throttle_smsmsgburst</code> , and <code>throttle_smsmsgrate</code> ). The third will be determined according to the following equation:
	$\text{timeinterval} = \text{smsmsgburst} / \text{smsmsgrate}$
<b>Accepted values</b>	Any real number.

**Default value** 0.0

### Committed rate measurement interval

**Section** [<SMPP>]

**Parameter** throttle\_timeinterval

**Description** The span of time during which a number of SMS messages specified by the [<SMPP>] throttle\_smsmsgburst parameter may be sent to the SMS Centre.

Please note: configure only two of the three throttle parameters (throttle\_timeinterval, throttle\_smsmsgburst, and throttle\_smsmsgrate). The third will be determined according to the following equation:

$$\text{timeinterval} = \text{smsmsgburst} / \text{smsmsgrate}$$

**Accepted values** Any integer.

**Default value** 0

### SMSC address

**Section** [<UCP>]

**Parameter** host

**Description** The network address of the SMSC.

**Accepted values** Any valid IP address or host name.

**Default value** 127.0.0.1

### SMSC port number

**Section** [<UCP>]

**Parameter** port

**Description** The port number of the SMS Centre.

**Accepted values** Any valid port number.

**Default value** 3000

### Local WDS host address

**Section** [`<UCP>`]

**Parameter** `localhost`

**Description** The network address of the WDS.

**Accepted values** Any valid IP address or host name.

**Default value** `127.0.0.1`

### Location of UCP configuration file

**Section** [`<UCP>`]

**Parameter** `confile`

**Description** The location of the file containing the following UCP configuration information:

```
[NAF]
networks TCP/IP
```

If no such file exists on your system, this information may also be kept in the `wds.ini` file. In that case, set the value of the `confile` parameter to the path and filename of `wds.ini` (e.g. `C:\wds\config\wds.ini`).

This parameter is required for Windows installations of Wireless Data Server.

**Accepted values** Any valid path and filename.

**Default value** None

### Wireless Data Server MSISDN

**Section** [`<UCP>`]

**Parameter** `msisdn`

<b>Description</b>	Wireless Data Server's MSISDN.
<b>Accepted values</b>	Any valid MSISDN number or alphanumeric address. See also the [ <UCP> ] <code>msisdntoa</code> parameter.

**Default value** None

### Wireless Data Server's type of address

<b>Section</b>	[ <UCP> ]
<b>Parameter</b>	<code>msisdntoa</code>
<b>Description</b>	The type of MSISDN address used by Wireless Data Server. Only change the value of this parameter if Wireless Data Server uses an alphanumeric MSISDN address, not a standard number (e.g. +15147338500).
<b>Accepted values</b>	1139 (NPI telephone and TON International) 5039 (alphanumeric address)
<b>Default value</b>	1139

### Wireless Data Server data coding scheme

<b>Section</b>	[ <UCP> ]
<b>Parameter</b>	<code>dcs</code>
<b>Description</b>	The data coding scheme used by Wireless Data Server. It is recommended that you do not change this value without consulting Stelton Support.
<b>Accepted values</b>	0 (default alphabet) 1 (user-defined or other type of alphabet)
<b>Default value</b>	0

### Committed burst size

<b>Section</b>	[ <UCP> ]
<b>Parameter</b>	<code>throttle_smsmsgburst</code>

**Description** The number of messages allowed by the SMS Centre in the time interval specified by the [`<UCP>`] `throttle_timeinterval` parameter.

Please note: configure only two of the three throttle parameters (`throttle_timeinterval`, `throttle_smsmsgburst`, and `throttle_smsmsgrate`). The third will be determined according to the following equation:

$$\text{timeinterval} = \text{smsmsgburst} / \text{smsmsgrate}$$

**Accepted values** Any integer.

**Default value** 0

### Committed information rate

**Section** [`<UCP>`]

**Parameter** `throttle_smsmsgrate`

**Description** The number of messages allowed by the SMS Centre over a given period of time. Specify the number of messages and time interval using the [`<UCP>`] `throttle_smsmsgburst` and `throttle_timeinterval` parameters.

Please note: configure only two of the three throttle parameters (`throttle_timeinterval`, `throttle_smsmsgburst`, and `throttle_smsmsgrate`). The third will be determined according to the following equation:

$$\text{timeinterval} = \text{smsmsgburst} / \text{smsmsgrate}$$

**Accepted values** Any real number.

**Default value** 0.0

### Committed rate measurement interval

**Section** [`<UCP>`]

**Parameter** `throttle_timeinterval`

**Description** The span of time during which a number of SMS messages specified by the [`<UCP>`] `throttle_smsmsgburst` parameter may be sent to the SMS Centre.

Please note: configure only two of the three throttle parameters (`throttle_timeinterval`, `throttle_smsmsgburst`, and `throttle_smsmsgrate`). The third will be determined according to the following equation:

$$\text{timeinterval} = \text{smsmsgburst} / \text{smsmsgrate}$$

**Accepted values** Any integer.

**Default value** 0

# 3

## Administration

### System maintenance

#### Daily procedures

- Ensure that Wireless Data Server is running.

#### UNIX

Grep the output of a `ps` command for the string “`wds`”.

#### NT

From the Start menu, select **Settings | Control Panel | Services**, and verify that the WDS service is flagged as “Started”.

- Check the WDS log files for errors.

#### Weekly procedures

- Archive all log files (optional).
- Stop and restart the WDS service (optional).

# System monitoring

To view a Wireless Data Server log file, go to the appropriate directory and open the file using a text editor. Wireless Data Server creates log files on its local host in the `/wds/log` directory, and on the calendar server's host in the `/users/unison/log/` directory. .

Table 3.1 • Wireless Data Server log files created on WDS host

Filename	Description
<code>wds.log</code>	Any error Wireless Data Server encounters. Also any information output by the <code>[WDS] debug, stats</code> and <code>tracking</code> parameters.
<code>&lt;logfile&gt;.log</code>	For information concerning the connection between Wireless Data Server and DCE modem. See the <code>[&lt;DCE&gt; logfile, debug, errlog, stats</code> and <code>trace</code> parameters in <code>wds.ini</code> .

Table 3.2 • Wireless Data Server log files created on calendar server host

Filename	Description
<code>smsnotify.log</code>	Created by <code>smsnotify</code> . Logs any errors encountered when passing wireless notification messages from the calendar server to Wireless Data Server.
<code>cws.log</code>	Log file for Corporate-Wide Services. As the CWS daemon is responsible for sending SMS messages to the <code>smsnotify</code> program, it will create an entry within <code>/users/unison/log/cws.log</code> for each SMS message processed. CWS supports more verbose logging, according to the configuration of <code>unison.ini</code> . Refer to the calendar server administration guide for more details.

## Interpreting log files

Much of the content of the Wireless Data Server log files is self-explanatory. Interpreting other sections may require the knowledge and resources of a qualified support representative. If you are uncertain about the content of a log file, contact your technical support representative for further assistance.

# Index

## A

accept and decline 21

## C

calendar server  
     interactions 7  
 configuration 11  
 confirm and decline 21  
 connections 8  
 core 7

## D

DCE 9

## L

log files 36

## M

maintenance 35  
 meetings  
     accept and decline 21  
 mobile-originated messages 8  
 mobile-terminated messages 8  
 monitoring 36  
 MSISDN  
     unique 8

## N

notification 8

## P

parameters 11–34  
     blockedmsisdns [WDS] 14  
     buffertranslog [WDS] 16  
     confile [<UCP>] 31

confirmcalevents [WDS] 21  
 dcs [<UCP>] 32  
 debug [<DCE>] 22  
 debug [WDS] 15  
 enquirelink [<SMPP>] 26  
 enquirelink\_timeinterval [<SMPP>] 26  
 errlog [<DCE>] 23  
 host [<SMPP>] 26  
 host [<UNISON>] 21  
 hostl [<UCP>] 30  
 license [LIC] 14  
 localhost [<UCP>] 31  
 logfile [<DCE>] 23  
 msgrefnum [WDS] 15  
 msisdn [<DCE>] 24  
 msisdn [<SMPP>] 27  
 msisdn [<UCP>] 31  
 msisdnnpi [<SMPP>] 27  
 msisdntoa [<UCP>] 32  
 msisdnton [<SMPP>] 27  
 nbsrefnum [WDS] 16  
 node [<UNISON>] 21  
 passwd [<SMPP>] 27  
 passwd [<UNISON>] 22  
 port [<DCE>] 23  
 port [<SMPP>] 28  
 port [<UCP>] 30  
 port [WDS] 17  
 smscharset [WDS] 17  
 smsconnections [WDS] 17  
 smscmsisdn [<DCE>] 24  
 smscplugin [WDS] 17  
 smsmode [<DCE>] 24  
 smtpmsgdir [WDS] 18

speed [<DCE>] 25  
stats [<DCE>] 25  
summaryminsize [WDS] 18  
systemid [<SMPP>] 28  
systemtype [<SMPP>] 28  
throttle\_smsmsgburst [<SMPP>] 29  
throttle\_smsmsgburst [<UCP>] 32  
throttle\_smsmsggrate [<SMPP>] 29  
throttle\_smsmsggrate [<UCP>] 33  
throttle\_timeinterval [<SMPP>] 30  
throttle\_timeinterval [<UCP>] 33  
trace [<DCE>] 25  
trace [WDS] 19  
transid [WDS] 16  
translogbuffersize [WDS] 17  
unisoncachesize [WDS] 19  
unisonconnections [WDS] 19  
userepeatsymbol [WDS] 20  
wreqmsgdir [WDS] 20  
wreqvalidityperiod [WDS] 20

plug-ins 9–10

## **R**

reminders 8

## **S**

section names 14

server

configuration parameters. See parameters

SMPP 9

smsnotify 7, 8

SMTP 8

system requirements 6

## **U**

UCP 10

## **W**

wds.ini. See parameters