



# The TelDial Driver

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The TelDial driver receives North-format alarms and then signals the specific alarm by connecting, via a modem, to a PABX telephone system and calling a DTMF number. A compatible PABX could then use the number called to trigger sending a pre-programmed text message to handsets. Available for ObSys.

This document relates to TelDial driver version 1.0

Please read the *Commander Manual* or *ObSys Manual* alongside this document, available from [www.northbt.com](http://www.northbt.com)

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# Purpose of TelDial Driver

The TelDial driver receives North-format alarms and then signals the specific alarm by connecting, via a modem, to a PABX telephone system and calling a DTMF number. A compatible PABX could then use the number called to trigger sending a pre-programmed text message to handsets.

Configure the comma-separated value file (CSV) with a list of alarm text to compare with the received alarm, and a number to call if it matches.

## Detailed Operation

Configure the alarm delivery module to deliver North-format alarms to the TelDial's alarm object (ALARM).

North-format alarms contain six text fields: system, point, condition, priority, and date & time. On receiving an alarm, TelDial compares the system, point, and condition fields with its list of alarm signals. All comparisons are case-sensitive.

The list of alarm signals is stored within a comma-separated value file (CSV) on the local PC. Each alarm signal contains an alarm text to compare with the received alarm, and a number to call if it matches.

For example, Consider a TelDial CSV file configured with the following lines:

CSV line	Alarm Text to Receive	Number to Call
1	Fire System Call Point 1 FIRE	12341111
2	Fire System Call Point 2 FIRE	12342222
3	Fire System Call Point 3 FIRE	12345555
4	Fire System Call Point 4 FIRE	12344444

The actual CSV file content would appear as follows:

```
Fire System|Call Point 2|FIRE,12342222
Fire System|Call Point 3|FIRE,12345555
Fire System|Call Point 4|FIRE,12344444
```

TelDial receives the following alarm:

```
Fire System|Call Point 2|FIRE|1|08/09/15|02:30:05
```

When TelDial receives an alarm, it matches the first three fields with the list of signals. This alarm matches CSV line 2, so TelDial calls the number 12342222.

## Common Alarm Text

When all the alarm signals contain the same start and/or end text, then this text can be specified in the TelDial Setup object. You will no longer need to include this text in the CSV file.

Use the **Alarm Start Text** (AS) and **Alarm End Text** (AE) objects to set the text.

Continuing from the example above, all the alarm signals start 'Fire System|' and end '|FIRE'.

We can set Alarm Start Text to 'Fire System|' and Alarm End Text to '|FIRE'.

Next, update the CSV file to contain the following lines:

CSV line	Alarm Text to Receive	Number to Call
1	Call Point 1	12341111
2	Call Point 2	12342222
3	Call Point 3	12345555
4	Call Point 4	12344444

TelDial receives the following alarm:

```
Fire System|Call Point 3|FIRE|1|08/09/15|04:15:23
```

When TelDial receives an alarm, it must first match the Alarm Start Text and Alarm End Text. This is removed from the alarm, and the remaining text is then matched with the list of signals. This alarm matches CSV line 3, so TelDial calls the number 12345555.

## Part Matching Alarm Text

The TelDial driver includes an object to **Match Alarm Start** (WE). When TelDial receives an alarm with this object set to 'yes', it will only compare its list of alarm signals with the start of the alarm.

Continuing from the previous example using the same CSV file, TelDial receives the following alarm:

```
Fire System|Call Point 3 Zone 5|FIRE|1|08/09/15|10:36:45
```

When TelDial receives an alarm, after any Alarm Start Text and Alarm End Text, it is then matched with the list of signals. With Match Alarm Start enabled, TelDial only needs to match the alarm signal text with the start of the alarm.

The alarm signal text from CSV line 3 matches the start of the alarm, so TelDial calls the number 12345555.

## Number to Call

The alarm signal within the CSV file contains a number to call. The TelDial driver also includes a **Telephone Number Prefix** (TS) that is added to the front of this number, and a **Telephone Number Suffix** (TE) that is added to the end of the number to call.

Continuing from the previous example, if the Telephone Number Prefix is set to '\*389', and the Telephone Number Suffix is set to '#', then the number called would be \*38912345555#.

# Using the Driver

On ObSys, the TelDial driver is pre-installed. Once started, you will need to set up the driver before it can receive alarms and call a number on the modem.

## Starting the Interface

- ☞ To start an interface using the TelDial driver, follow these steps:
  - **Start Engineering** your North device using ObSys
  - Navigate to **Configuration, Interfaces**, and set an unused **Interface** to 'TelDial' to start the particular interface
  - Navigate to the top-level of your North device and re-scan it

The driver setup object (Mc), labelled **TelDial Setup**, should now be available. If this object is not available, check an interface licence is available and the driver is installed.

## Setting up the Driver

- ☞ To set up the driver, follow these steps:
  - Navigate to the **TelDial Setup** object (Mc). For example, if you started interface 1 with the driver earlier, then the object reference will be 'M1'
  - Set **RS232 COM Port** (RS.COM) to select the serial port number on the North device the modem is connected
  - Configure the CSV file containing the alarm signals, as described in the Detailed Operation section above. Then set the **Filename** (FN) to the location of the CSV file containing the alarm signals, e.g. 'C:\Users\Default\Documents\AlarmLookup.csv'

## Checking Communications

Check the **Modem Communicating** object (DS), TelDial will not accept alarms until the connected modem is responding.

Trigger an alarm event on the system. Check that it has been delivered to TelDial by reading the **New Alarm** object (ALARM), and that a signal was set by reading the **Last Number Called** object (LC).

# Object Specifications

Once an interface is started, one or more extra objects become available within the top-level object of the device. As with all North objects, each of these extra objects may contain sub-objects, (and each of these may contain sub-objects, and so on) - the whole object structure being a multi-layer hierarchy. It is possible to navigate around the objects using the ObSys Engineering Software.

Each object is specified below, along with its sub-objects.

## Example Object Reference

An example of a reference to an object in the same device: The TelDial System (S1) contains a New Alarm object (ALARM), this is the object at which alarms are sent to be processed by the driver. Therefore, the complete object reference will be 'S1.ALARM'.

An example of a reference to an object in a different device: the IP network object (IP) contains an IP alias object of another North ObSys instance (A1), which contains the object above (S1.ALARM) – therefore the complete object reference is 'IP.A1.S1.ALARM'.

## Device Top-Level Objects

When an interface is started using the TelDial driver, the objects below become available within the top-level object of the device. For example, if Interface 1 is started, then the object with references 'M1' and 'S1' become available.

Description	Reference	Type
<b>TelDial Setup</b> Set up the TelDial driver, started on interface <i>c</i> ( <i>c</i> is the interface number)	Mc	Fixed Container: On ObSys platforms this will be <i>[OSM v20\TelDial v10]</i>
<b>TelDial System</b> Access TelDial system connected to interface <i>c</i> ( <i>c</i> is the interface number)	Sc	Fixed Container: <i>[TelDial v10]</i>

# TelDial Driver Setup

Object Type: [OSM v20\TelDial v10]

Refer to the *Detailed Operation* section for information on configuring the CSV file, and using the alarm text, and telephone number objects.

The TelDial driver setup contains the following objects:

Description	Reference	Type
<b>RS232 COM Port</b>	RS.COM	Obj\Num: 1...8; Adjustable
<b>Baud Rate</b>	RS.BR	Obj\Num; Adjustable; Default: 19200 Range: 2400, 4800, 9600, 19200 or 38400
<b>Filename (CSV)</b> Full path and name of the CSV file configured with list of alarm signals	FN	Obj\File; Adjustable
<b>Alarm Start Text</b> Common alarm text to match at the start of each alarm message, before comparing with the alarm signals in the CSV file	AS	Obj\Text: max 63 chars; Adjustable
<b>Alarm End Text</b> Common alarm text to match at the end of each alarm message, before comparing with the alarm signals in the CSV file	AE	Obj\Text: max 63 chars; Adjustable
<b>Telephone Number Prefix</b> Number to insert before the number to call configured in the matching alarm signal	TS	Obj\Text: max 31 chars; Adjustable
<b>Telephone Number Suffix</b> Number to insert after the number to call configured in the matching alarm signal	TE	Obj\Text: max 31 chars; Adjustable
<b>Dial and Wait Time (sec)</b> Maximum time the driver will wait for a response from the modem after calling. Once this time has elapsed, the driver will process the next alarm	OT	Obj\Num: 10...60; Adjustable
<b>Match Alarm Start</b> Only compare the list of alarm signals with the start of the alarm message	WE	Obj\NoYes; Adjustable
<b>Modem Communicating</b> Indicates the driver has initialized the modem, and it is able to call a number	DS	Obj\NoYes

# TelDial System

Object Type: [TelDial v10]

The TelDial system contains the following objects:

Description	Reference	Type
<b>New Alarm</b> Deliver new North-format alarms to this object for processing	ALARM	Obj\Alarm; Adjustable
<b>New Text</b> Deliver new text messages to this object for processing	TXT	Obj\Text: max 127 chars; Adjustable
<b>Last Number Called</b> Indicates the last number called on receipt of a matching alarm signal	LC	Obj\Text



# Driver Versions

Version	Build Date	Details
1.0	11/04/2006	Driver released
1.0	12/12/2014	Added Match Alarm Start object to driver setup
1.0	13/11/2015	ALARM and TXT objects now read back last value set Added objects DS and LC

## Next Steps...

If you require help, contact support on 01273 694422 or visit [www.northbt.com/support](http://www.northbt.com/support)



North Building Technologies Ltd  
+44 (0) 1273 694422  
[support@northbt.com](mailto:support@northbt.com)  
[www.northbt.com](http://www.northbt.com)

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Author: BS  
Checked by: JF

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