funkwerk
enterprise communications

bintec Workshop

DIME tools

Copyright © March 7, 2006 Funkwerk Enterprise Communications GmbH
Version 0.9

Purpose

This document is part of the user's guide to the installation and configuration of bintec gateways running software release 7.1.4 or later. For up-to-the-minute information and instructions concerning the latest software release, you should always read our **Release Notes**, especially when carrying out a software update to a later release level. The latest **Release Notes** can be found at www.funkwerk-ec.com.

Liability

While every effort has been made to ensure the accuracy of all information in this manual, Funkwerk Enterprise Communications GmbH cannot assume liability to any party for any loss or damage caused by errors or omissions or by statements of any kind in this document and is only liable within the scope of its terms of sale and delivery.

The information in this manual is subject to change without notice. Additional information, changes and **Release Notes** for bintec gateways can be found at www.funkwerk-ec.com.

As multiprotocol gateways, bintec gateways set up WAN connections in accordance with the system configuration. To prevent unintentional charges accumulating, the operation of the product should be carefully monitored. Funkwerk Enterprise Communications GmbH accepts no liability for loss of data, unintentional connection costs and damages resulting from unsupervised operation of the product.

Trademarks

bintec and the bintec logo are registered trademarks of Funkwerk Enterprise Communications GmbH.

Other product names and trademarks mentioned are usually the property of the respective companies and manufacturers.

Copyright

All rights are reserved. No part of this publication may be reproduced or transmitted in any form or by any means – graphic, electronic, or mechanical – including photocopying, recording in any medium, taping, or storage in information retrieval systems, without the prior written permission of Funkwerk Enterprise Communications GmbH. Adaptation and especially translation of the document is inadmissible without the prior consent of Funkwerk Enterprise Communications GmbH.

Guidelines and standards

bintec gateways comply with the following guidelines and standards:

R&TTE Directive 1999/5/EG

CE marking for all EU countries and Switzerland

You will find detailed information in the Declarations of Conformity at www.funkwerk-ec.com.

How to reach Funkwerk Enterprise Communications GmbH

Funkwerk Enterprise Communications GmbH Suedwestpark 94 D-90449 Nuremberg Germany Telephone: +49 180 300 9191 0 Fax: +49 180 300 9193 0 Internet: www.funkwerk-ec.com	Bintec France 6/8 Avenue de la Grande Lande F-33174 Gradignan France Telephone: +33 5 57 35 63 00 Fax: +33 5 56 89 14 05 Internet: www.bintec.fr

1 Introduction 3
1.1 Requirements 3
2 Configuration 5
2.1 TFTP Server 5
2.2 Time Server 7
2.3 Syslog Daemon 9
2.4 BootP Server 12

1 Introduction

The configuration of the DIME Tools is described in the following chapters. This includes the services for the TFTP Server, Time Server, Syslog Deamon and BootP Server.

1.1 Requirements

The following is required for the configuration:

- **Brickware** version 7.1.1 or later must be installed.

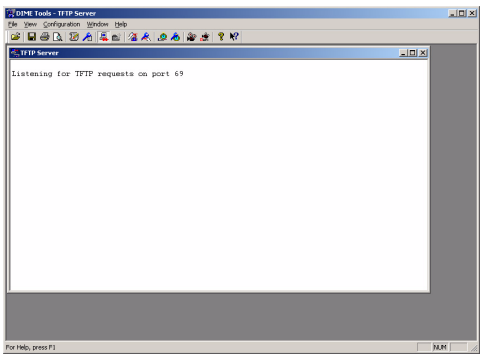
2 Configuration

To configure the DIME Tools, start the following program under Windows:

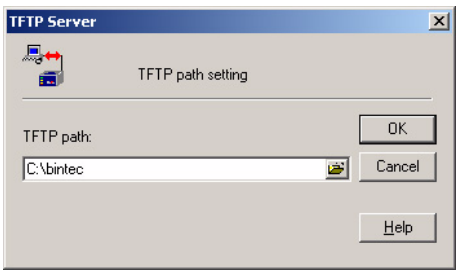
START ➜ PROGRAM ➜ BRICKWARE ➜ DIME TOOLS

2.1 TFTP Server

The TFTP server is used to transfer files between router and computer, e.g. for configuration management or updates. In this example, you use the TFTP server to load an update to the router. Make sure the TFTP server is running once you have opened the DIME Tools. Start the TFTP server by pressing the key combination *CTRL* + *T*.



To assign the TFTP server a directory, e.g. for saving files, you can enter a path under ***CONFIGURATION ➜ TFTP SERVER***.



You run the update from the router shell. Enter the following, for example, if your TFTP server's IP address is *192.168.0.2* and the update file name is *vpn25-s7112.v3a*:

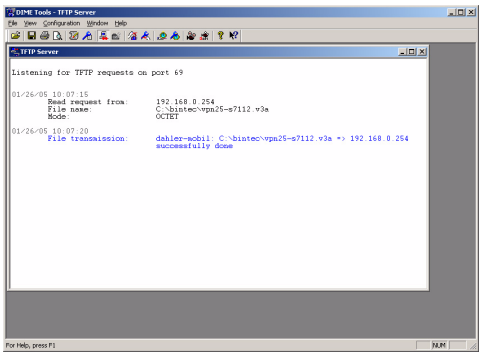
```
update 192.168.0.2 vpn25-s7112.v3a
```

You then receive the following message in the router:

```
Starting TFTP File Transfer ..... OK (3417978 Bytes received)
Checking new Boss Image ... OK

Your current software release is 7.1.6.
Loaded new Boss Image has release 7.1.12.

The update will take approximately 1 minute.

*** Don't power-off while the update takes place ***

Perform update (y or n) ? y

Updating Boss
Erasing Flash ROM ........................... OK
Writing Flash ROM ........................... OK
Verify  Flash ROM ........................... OK

Software update successfully finished

Reboot now (y or n) [n] ?
```

- Answer all questions with **y** to carry out the update.

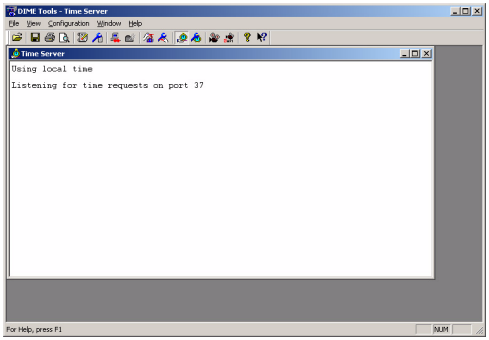
The TFTP server looks like this if the file has been transferred successfully:



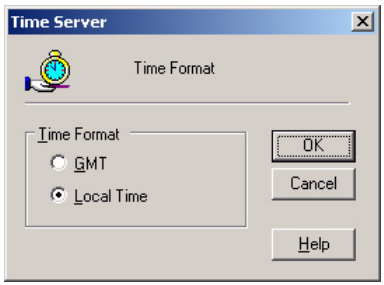
2.2 Time Server

The time server is used to synchronize the network time to PCs or routers. Make sure the time server is running once you have opened the DIME Tools.

Start the time server by pressing the key combination **CTRL** + **M** in the DIME Tools.



You can configure the time server under ***CONFIGURATION*** ➜ ***TIME SERVER***.



The following fields are relevant:

Field	Meaning
GMT	Select this item if you wish to use Greenwich Mean Time.
Local Time	Select this item if you want the time server to transfer local time.

Table 2-1: Relevant fields in ***CONFIGURATION*** ➜ ***TIME SERVER***

- Go to ***IP*** ➜ ***STATIC SETTINGS*** to configure the time server in the router.

```
VPN Access 25 Setup Tool                    Bintec Access Networks GmbH
[IP][STATIC]: IP Static Settings                                Zentrale

          Domain Name
          Primary Domain Name Server
          Secondary Domain Name Server
          Primary WINS
          Secondary WINS
          Time Protocol                     TIME/UDP
          Time Offset (sec)                 0
          Time Update Interval (sec)        86400
          Time Server                       192.168.0.2
          Remote CAPI Server TCP port       2662
          Remote TRACE Server TCP port      7000
          RIP UDP port                      520
          Primary BOOTP Relay Server
          Secondary BOOTP Relay Server
          Unique Source IP Address
          HTTP TCP port                     80

           SAVE                                 CANCEL

Enter string, max. length = 35 chars
```

The following fields are relevant:

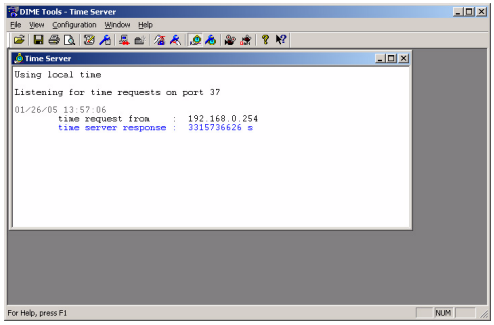
Field	Meaning
Time Protocol	For selecting the time protocol for the time server.
Time Offset (sec)	For adjusting the hours for time offset.
Time Update Interval (sec)	Define the synchronization interval.
Time Server	Enter an IP address for the time server.

Table 2-2: Relevant fields in ***IP*** ➜ ***STATIC SETTINGS***

Proceed as follows to configure the entry:

- Set ***TIME PROTOCOL***, e.g. to *TIME/UDP*.
- Set ***TIME OFFSET (SEC)***, e.g. to *0*.
- Set ***TIME UPDATE INTERVAL (SEC)***, e.g. to *86400*.
- The IP address of the ***TIME SERVER*** is, for example, *192.168.0.2*.

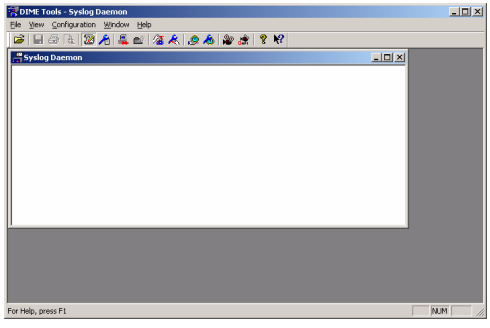
You receive the following message in the time server if time synchronization is successful:



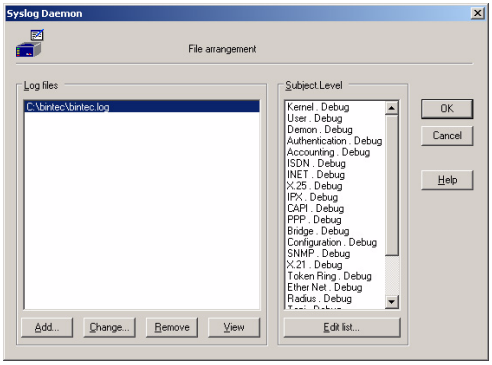
2.3 Syslog Daemon

The Syslog Daemon is used to log the debug messages and accounting information on a computer. Make sure the Syslog Daemon is running once you have opened the **DIME Tools**.

Start the Syslog Daemon by pressing the key combination *CTRL* + *L* in the **DIME Tools**.

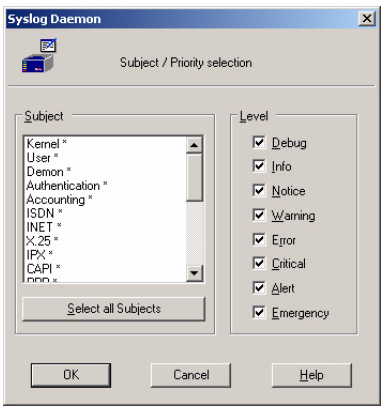


The configuration is made in the ***CONFIGURATION*** ➜ ***SYSLOG DAEMON*** menu.



Proceed as follows to configure an entry:

- Click **Add** and enter a file name, e.g. *bintec.log*.
- Go to the **Edit List** field to continue the configuration.



Proceed as follows if you would like to log all the messages sent by the router:

- Click the **Select all Subjects** field.
- Tag *Debug*.
- Leave both windows by pressing **OK**.

You must add an entry in the following menu to make the router send the debug messages to the Syslog server:

- Go to ***SYSTEM ➜ EXTERNAL SYSTEM LOGGING ➜ ADD.***

```
VPN Access 25 Setup Tool                        Bintec Access Networks GmbH
[SYSTEM][LOGGING][ADD]                                            Zentrale

          Log Host                      192.168.0.2
          Level                         debug
          Facility                      local0
          Type                          all
          Timestamp                     none




           SAVE                                    CANCEL
```

The following fields are relevant:

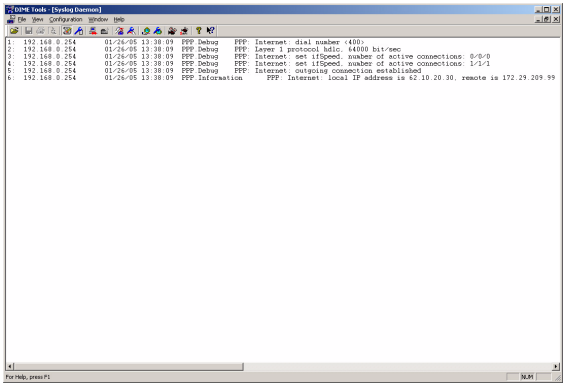
Field	Meaning
Log Host	Enter the IP address of the Syslog server.
Level	Select the type of messages you wish to send.

Table 2-3: Relevant fields in ***SYSTEM ➜ EXTERNAL SYSTEM LOGGING ➜ ADD***

Proceed as follows to configure the entry:

- Enter the IP address of the server under ***LOG HOST***, e.g. *192.168.0.2*.
- Set ***LEVEL*** to *debug*.

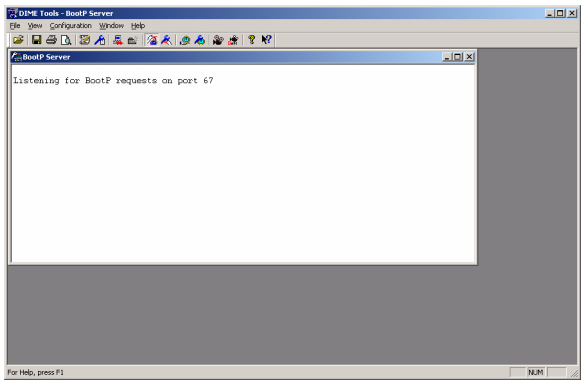
If the router is active, you should now receive a number of messages in the Syslog server window.



2.4 BootP Server

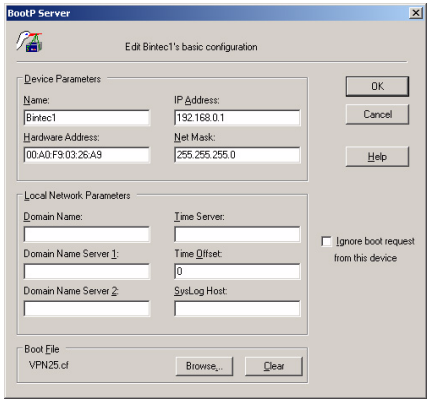
The BootP server gives you the possibility of transferring an IP address or a complete configuration to a Bintec router in the ex works state during booting. Make sure the BootP server is running once you have opened the DIME Tools.

Start the BootP server by pressing the key combination **CTRL** + **B** in the **DIME Tools**.



You can save defaults for individual routers for transferring complete configurations in the following menu:

CONFIGURATION ➜ BOOTP SERVER



The following fields are relevant:

Field	Meaning
Name	Give the router a system name.
IP Address	Enter the IP address of the LAN interface.
Hardware Address	Enter the MAC address of the router.
Net Mask	This is the subnetwork mask that belongs to the IP address.
Browse	Enter a file name for the configuration you wish to transfer to the router.

Table 2-4: Relevant fields in ***CONFIGURATION ➜ BOOTP SERVER***

Proceed as follows to configure the entry:

- Enter ***NAME***, e.g. *Bintec1*.
- Enter the IP address under ***IP ADDRESS***, e.g. 1*92.168.0.1*.
- Enter ***HARDWARE ADDRESS***, e.g. *00:A0:F9:03:26:A9*.
- The ***NET MASK*** is, for example, *255.255.255.0*.
- Select the configuration file under ***BROWSE***, e.g. *VPN25.cf*.

- Leave both windows by pressing **OK**.

When you restart the Bintec router, it receives an IP address from the BootP server during booting.

Note

The configuration you transfer via BootP must be located in the TFTP server directory.

Please do not forget to start the TFTP server if you wish to transfer a file.