## **Authentication Server**

Reference
15 September 2000



Karl-Heinz Weber Heinrichstraße 12 D-45711 Datteln/Horneburg Germany **Document History** First release: 15 September2000

Trademarks or The following are trademarks or service marks of Tandem **Service Marks** 

Computers Incorporated:

Atalla, Challenge/Response, Enform, Expand, Guardian, Guardian 90, Inspect, Multilan, NonStop, TACL, Tandem.

All brand names and product names are trademarks or registered

trademarks of their respective companies.

Copyright Copyright © 2000 by *GreenHouse Software & Consulting*. All

> rights reserved. No part of this document may be reproduced in any form, including photo copying or translation to another

> language, without prior written consent of GreenHouse Software &

Consulting.

Printed in Germany.

**Please Comment** If you have questions or problems concerning the content of this

document, please let me know! Send your comments to:

GreenHouse Software & Consulting

Karl-Heinz Weber Heinrichstraße 12

D-45711 Datteln/Horneburg

Germany

Phone +49 (0)2363 72566 Fax +49 (0)2363 66106

Mobile +49 (0)172 23 18248

E-Mail: Carl.Weber@GreenHouse.de

www.GreenHouse.de Internet:



Authentication Server (\$AS) adds a new authentication method to the standard authentication service on GUARDIAN systems (which is performed based on static passwords). \$AS offers Challenge/Response and TimeToken Authentication, based on Atalla and Vasco Challenge/Response Devices. \$AS is intended for use by PATHWAY applications and GHS products.

## Features:

- The \$AS system is monitored by a PATHMON process pair (for availability reasons).
  - Any running PATHMON can be used.
- \$AS runs as a server class: the PATHMON in charge of \$AS is responsible for starting/re-starting the service.
- The \$AS process can be reached through PATHSEND, or directly with OPEN/WRITEREAD/CLOSE procedures.
- \$AS process supports the following messages:
  - 1. Generate a random number
  - 2. Check a Challenge/Response number pair
  - 3. Check a TimeToken
  - 4. Authentication Request (initialization)
  - 5. Authentication (finalization)
  - 6. Return statistical information
- INITACR, a block mode program to initialize Atalla (or compatible) Challenge/Response Tokens.
- ASCOM, (Authentication Server Command Interpreter) allowing the management of the \$AS system.

## Additional \$AS features

- After three consecutive failed checks, the requesting process is delayed for a configurable time, preventing an exhaustive search for a valid Challenge/Response number pair.
- \$AS is developed and compiled on an S-Series system, running G06.

This design allows the \$AS to become the central authentication service on a Tandem system or even on a network of Tandem systems.

All *GreenHouse* products that feature Challenge/Response or TimeToken Authentication are supported by \$AS.



## Relationship Between the Different Parties in the Authentication Server Environment



