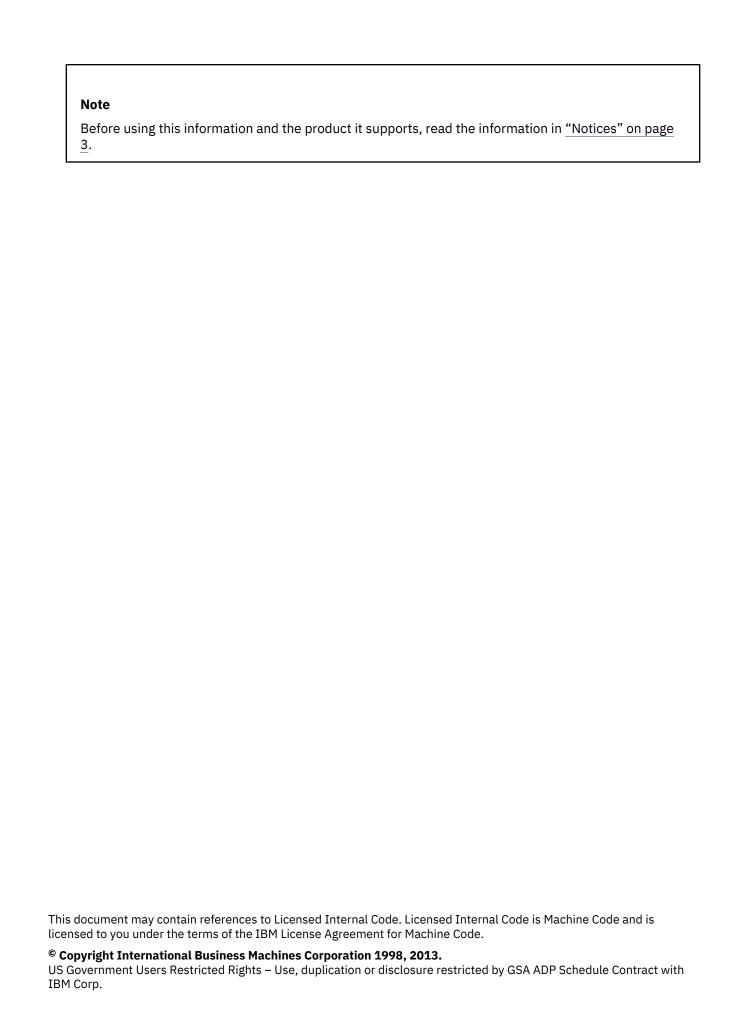
IBM i Version 7.2

Networking INETD





Contents

INETD	
PDF file for INETD	
Overview of INETD server	
Configuring the INETD server	
Notices	3
Programming interface information	
Trademarks	
Terms and conditions	

INETD

Use this information to plan for, configure INETD on your system.

This information assumes that you have worked on the i5/OS operating system before and have a working knowledge of INETD.

PDF file for INETD

You can view and print a PDF file of this information.

To view or download the PDF version of this document, select INETD (about 692 KB).

Saving PDF files

To save a PDF on your workstation for viewing or printing:

- 1. Right-click the PDF link in your browser.
- 2. Click the option that saves the PDF locally.
- 3. Navigate to the directory in which you want to save the PDF.
- 4. Click Save.

Downloading Adobe Reader

You need Adobe Reader installed on your system to view or print these PDFs. You can download a free copy from the Adobe Web site (www.adobe.com/products/acrobat/readstep.html) .

Overview of INETD server

INETD is sometimes referred to as the "Internet Super-Server" because it manages connections for several services.

When a connection is received by INETD, it determines which program the connection is destined for, spawns the particular job, and delegates the socket to it (the program is invoked with the service socket as its standard input, output, and error descriptors). Running INETD for servers that are not heavily used can reduce the overall system load, when compared to running each daemon individually in stand-alone mode.

The INETD server has several built-in services:

- Time
- Daytime
- Echo
- Discard
- Chargen

Configuring INETD server

You can configure your INETD server to work with /QIBM/USERDATA/OS400/INETD/INETD.CONF.

In 7.2, INETD server provides addition options "[/max-child[/max-connections-per-ip-per-minute[/max-child-per-ip]]" to control the incoming connections.

Here is the options list as follows:

Options
service-name
socket-type
protocol
<pre>{wait nowait}[/max-child[/max-connections-per-ip-per- minute[/max-child-per-ip]]]</pre>
user
service-path
service-program
service-program-arguments

service-name It is the service name. It must be in services file (WRKSRVTBLE) (for example ftp, telnet...)

socket-type The communications socket type, the different types are "stream" for a TCP stream, "dgram" for a UDP service

protocol tcp or udp

wait|nowait Indicates whether the services invoked from inetd is able to handle its own socket or not.
dgram socket types (UDP service) must use the wait option, while stream socket services (TCP service)
should use nowait.

max-child Indicates the maximum number of child jobs INETD might spawn. For example, if a limit of 10 instances of a particular daemon is needed, a/10 would be placed after nowait. Specifying /0 allows an unlimited number of children.

Note: /0 is not recommended for safety concern.

max-connections-per-ip-per-minute Limits the number of connections from any particular IP address per minutes. Specifying /0 allows an unlimited number of connections.

max-child-per-ip Limits the number of children that can be started on behalf on any single IP address at any moment. Specifying /0 allows an unlimited number of children for any single IP.

Note: In common, max-child-per-ip should not be greater than max-child, otherwise, it is meaningless.

user User profile name (for example, QUSER). The profile must be *ENABLED and cannot have *SECADM or *ALLOBJ special authorities.

service-path Path to program in the QSYS.LIB file system to process the request

service-program Program name (received as argv[0])

service-program-arguments (0-19)

Examples

service-name stream tcp nowait QUSER /QSYS.LIB/QGPL.LIB/XYZ.PGM XYZ other-service dgram udp wait QUSER /QSYS.LIB/QGPL.LIB/ABC.PGM ABC Parm1 Parm2 service-name stream tcp nowait/10/20/5 QUSER /QSYS.LIB/QGPL.LIB/XYZ.PGM XYZ

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:

Intellectual Property Licensing Legal and Intellectual Property Law IBM Japan Ltd. 1623-14, Shimotsuruma, Yamato-shi Kanagawa 242-8502 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.

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 Software Interoperability Coordinator, Department YBWA 3605 Highway 52 N Rochester, MN 55901 U.S.A. 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.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

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 is for planning purposes only. The information herein is subject to change before the products described become available.

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.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

Each copy or any portion of these sample programs or any derivative work, must include a copyright notice as follows:

- © (your company name) (year). Portions of this code are derived from IBM Corp. Sample Programs.
- © Copyright IBM Corp. enter the year or years.

Programming interface information

This INETD publication documents intended Programming Interfaces that allow the customer to write programs to obtain the services of IBM i.

Trademarks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

Java[™] and all Java-based trademarks and logos are trademarks of Oracle, Inc. in the United States, other countries, or both.

Other product and service names might be trademarks of IBM® or other companies.

Terms and conditions

Permissions for the use of these publications is granted subject to the following terms and conditions.

Personal Use: You may reproduce these publications for your personal, noncommercial use provided that all proprietary notices are preserved. You may not distribute, display or make derivative works of these publications, or any portion thereof, without the express consent of IBM.

Commercial Use: You may reproduce, distribute and display these publications solely within your enterprise provided that all proprietary notices are preserved. You may not make derivative works of these publications, or reproduce, distribute or display these publications or any portion thereof outside your enterprise, without the express consent of IBM.

Except as expressly granted in this permission, no other permissions, licenses or rights are granted, either express or implied, to the publications or any information, data, software or other intellectual property contained therein.

IBM reserves the right to withdraw the permissions granted herein whenever, in its discretion, the use of the publications is detrimental to its interest or, as determined by IBM, the above instructions are not being properly followed.

You may not download, export or re-export this information except in full compliance with all applicable laws and regulations, including all United States export laws and regulations.

IBM MAKES NO GUARANTEE ABOUT THE CONTENT OF THESE PUBLICATIONS. THE PUBLICATIONS ARE PROVIDED "AS-IS" AND WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT, AND FITNESS FOR A PARTICULAR PURPOSE.

#