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*The content of this booklet is based on the Services 10.0 Release.*

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# Preface

**Purpose**    The Interactive Terminal Service booklet describes all that you need to know to set up and maintain your Interactive Terminal Service. This booklet explains all the service commands and shows how these commands are used to perform service-related tasks. In addition, the booklet lists all the messages that can be generated while running this service and tells you what to do when a message is displayed.

**Intended audience**    This publication is intended for System Administrators who are responsible for starting up and keeping the Interactive Terminal Service running efficiently.

**Before you read this booklet**    There is some general information about services that you need to be familiar with before you can understand this booklet. Read the "Services Executive" section in the *Server Operation and Maintenance* booklet, and the *Introduction to Network Administration* booklet. All of these publications can be found in the *Network Basic Services* volume.

**Before you can use this service**    As part of the preparation for setting up the Interactive Terminal Service, you need to perform the procedures described in the *Server Software Installation* booklet. This booklet is also part of the *Network Basic Services* volume.

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The Interactive Terminal Service (ITS) makes it possible for users of TTY-like terminals and non-networked personal computers emulating teletypewriters to access the Xerox Network Mail, File, and Print services. By dialing a telephone connection with the Interactive Terminal Service, the users of such devices can exchange messages and documents with other users on the Xerox Network System.

Users who have terminals at home or at locations away from the Xerox Network can call up the Interactive Terminal Service and log on. Once logged on to the Interactive Terminal Service, users can create and send messages and documents to other network users, manipulate files and directories stored at internetworked File Services, and move files between their terminals and an internetworked File Service. They can also send files to a Print Service and print them at printers on the network.

*Note:* You must perform the procedures described in the *Server Software Installation* booklet in the *Network Basic Services* volume before using this booklet.

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# 2. Commands

This chapter lists all the Interactive Terminal Service commands. The commands below are listed in alphabetical order, followed by a brief explanation. To address the Interactive Terminal Service commands you must be in the Interactive Terminal Service context.

**List Users**   Displays information about users logged on to the ITS and the state of each current user session.

**Rename**   Allows you to change the name of the Interactive Terminal Service after initial installation.

**Set Tracing**   Enables a logging facility to display on the screen. This facility provides information about when a connection is made to the ITS, and the start and stop times of a user session.

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This chapter provides step-by-step instructions for initializing the Interactive Terminal Service on a new network, as well as adding this service to an existing network. The Interactive Terminal Service can do its job only if the External Communication Service is configured to support asynchronous dial-in.

The procedures described in this chapter, and in the *External Communication Service* booklet, should be performed to set up this service:

- Adding a Communication Interface Unit, if necessary. (Refer to the *External Communication Service* booklet.)

- Configuring ports for asynchronous terminal emulation and asynchronous dial-in (Complete ECS Form 8A, Registering an Asynchronous/8000 Port, or ECS Form 8B, Registering an Asynchronous/873 Port. These forms are in the *External Communication Service* booklet.)

- Initializing the Interactive Terminal Service.

*Note:* Make sure the Services boot file process limits have not been exceeded when configuring ports and services involving the External Communication Service, Interactive Terminal Service, and the Internetwork Routing Service. Refer to the *External Communication Service* booklet for more information.

# Initializing your Interactive Terminal Service

The following procedure is based on the assumption that the External Communication Service and the Interactive Terminal Service have been installed and run by the **Run Service** and **Proceed** commands. The installation procedures are explained in the *Server Software Installation* booklet.

The first time the Interactive Terminal Service runs, you are prompted for information about the number of users the ITS will support, and the amount of file space for each user. When you have supplied that information, the ITS is initialized. You are then prompted to specify the name and description of the ITS, which registers the service with the Clearinghouse. Use ITS Form 1, Directory of Services on a Specific Server, to help respond to the questions. This form is in Appendix A.

## Procedure

1.  Type in the number of users allowed to access the Interactive Terminal Service, and press < RETURN >. The maximum number of simultaneous users an ITS will support is eight.

   ```
   Running Interactive Terminal Service.
   ITS: Interactive Terminal Service is initializing.
        Number of users allowed (1...8):
   ```

2.  Type in the number of file pages per user and press < RETURN >.

   *Note:* The number of file pages (0...1250) you allocate per user depends on the amount of free space available on the server. The file space on the user volume is used up according to the number of users on the ITS, and the number of file pages allocated per user. If you type 0 (for number of pages allocated for each user), the amount of file space used by each ITS user is limited only by the number of free pages available on the server's filing volume, with a maximum of 10,000 pages. If you do not know the number of file pages to allocate per user, type **200**.

   The allocated file pages are also the maximum file size that gets transferred using the Interactive Terminal Service XModem feature. The number you assign for each user is not static; the ITS acquires the file space as needed.

   *Note:* An ITS user may be denied access because other users have temporarily exhausted the available file space. This condition is cleared as users log off the ITS.

   The ITS does not hold on to workspace after a connection is terminated. An ITS user may be denied worksapce because other coresident services have used the available Services Volume pages. Use the **List Volume** command to monitor the available free space.

Make sure that the total amount of space required by all the services running on a particular server does not exceed the disk space requirements for that server. If the number of file pages needs to be changed, you can reconfigure the Interactive Terminal Service following the procedure described in the "Reconfiguring Interactive Terminal Service resources" section.

3.  Type in the name for the Interactive Terminal Service (from Form 1) and press <RETURN>.

4.  Type in the Interactive Terminal Service description and press <RETURN>. At this point, the software registers the service in the appropriate Clearinghouse domain.

```
        Number of users allowed (1...8): 8RETURN
        Number of file pages per user (0...1250): 0RETURN
ITS: Interactive Terminal Service is initialized.
ITS: Service name and description unknown.
        Enter service name: Com3-ITS:OurDomain:OurOrgRETURN
        Enter service description: ITS/Services ExecutiveRETURN
        Confirm? (Y/N): YRETURN
ITS: Validating Clearinghouse entry for Com2-ITS:OurDomain:OurOrg
ITS: A new Clearinghouse entry was created.
ITS: Done.
ITS: Interactive Terminal Service is started.
Interactive Terminal Service run.
```

*Note:* If the name or description of the Interactive Terminal Service needs to be changed at a later time, use the **Rename** command as described in the "Renaming the Interactive Terminal Service" section.

5.  Continue with the "Setting up your asynchronous terminal emulation and dial-in" section in the *External Communication Service* booklet, to configure your port(s) for the Interactive Terminal Service.

**Comment:** The XModem protocol facilitates file transfers, and has been implemented for use in a variety of personal and mainframe computers. If you are configuring your Interactive Terminal Service port for XModem file transfer, be sure to specify eight data bits, no parity, and one stop bit. Also, flow control cannot be enabled. If you are configuring your Interactive Terminal Service port for a type of file transfer other than XModem, XModem protocol cannot be configured on that same port.

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Use the procedures in this section to perform the specific tasks needed to keep the Interactive Terminal Service running. These tasks are done on an as-needed basis using commands specific to the Interactive Terminal Service and to the operating system. For the commands specific to the Interactive Terminal Service, you must be logged on and enabled in the ITS context.

The following procedures are in this section:

* Creating the Interactive Terminal Service user profiles drawer

* Monitoring Interactive Terminal Service sessions

* Reconfiguring Interactive Terminal Service resources

* Listing users

* Renaming the Interactive Terminal Service

* Removing the Interactive Terminal Service from a server.

# Creating the ITS user profiles drawer

The ITS user profiles drawer is used by the Interactive Terminal Service to store options set by the user at the last logoff. These options include values set by the user's current directory path, terminal options, and print service information. If you have users who are accessing the Interactive Terminal Service facility, you need to create a file drawer named "ITS User Profiles" on the home File Service of each such user. The home File Service is the service on which a user's 8010/6085 workstation is stored. This information is obtained by issuing a **Show User** command at the Clearinghouse Service.

The procedure for creating a user profile drawer includes defining the drawer, and setting a page limit per user. Depending on your File Service configuration, you may have to repeat the following procedure to create one ITS user profiles drawer for each home File Service.

## Procedure

1. Go to the server that is a home File Service for one or more ITS users. Log on and enable yourself in the File Service context.

```
> Logon RETURN
    User's Name: XXX RETURN
    Password: **** RETURN
> Enable RETURN
! File Service RETURN
FS!
```

2. Type **Add File Drawer** and press < RETURN >.

3. Select the volume on which you wish to add the drawer. If the File Service is running on a multiple file drive server, type the number corresponding to the File Service you want and press < RETURN >.

4. Type **ITS User Profiles** in response to the "File Drawer Name" prompt and enter your name as the file drawer owner.

5. Set the page limit at about two pages per Interactive Terminal Service user (for example, 200 pages if you anticipate that 100 users will be using the Interactive Terminal Service).

After the file drawer has been created, use the **Change File Drawer** command to set the access rights. Give yourself permission to read, write, add, remove, and change access. Give all users permission to read, write, add, and delete files. This is done by giving group access to the file drawer. Include as members all ITS users with a particular file service as their home file service. After the access rights have been set, you do not have to add any files to the drawer. The Interactive Terminal Service will use this drawer to store user data.

## Monitoring Interactive Terminal Service sessions

There will be times when you want to monitor current Interactive Terminal Service activity. For example, you may want to find out if current users are being automatically logged off by the system because of error conditions, or see which ones are heavily using the Interactive Terminal Service. The information that displays on the screen when you use the **Set Tracing** command reflects user activity as it occurs.

**Comment:** If you wish to see the state of each current user session, refer to the "Listing Users" section.

## Procedure

1. Log on and enable yourself in the Interactive Terminal Service context.

```
>LogonRETURN
    User's Name: XXXRETURN
    Password: ****RETURN
>EnableRETURN
!Interactive Terminal ServicRETURN
ITS!
```

2. Type **Set Tracing** and press < RETURN >.

3. Type **Y** to the "On" prompt to begin the Interactive Terminal Service tracing and press < RETURN >.

   Once tracing has begun, session activity messages appear as activity occurs. Messages display information referring to user logon, user logoff, and other session activity information. This information is displayed as a time stamp, indicating the times for the beginning and end of ITS user sessions. From this you can derive the user session length, and the logon and logoff times. To stop monitoring Interactive Terminal Service sessions, continue with steps 4-6.

4. Type **Set Tracing** and press < RETURN >.

5. Type **Y** to the "Off" prompt to disable this option and press < RETURN >.

6. Log off from the Interactive Terminal Service context.

# Reconfiguring Interactive Terminal Service resources

An Interactive Terminal Service needs file space on the user volume for temporary storage of filing and mailing operations. The file space on the user volume is used up according to the number of users accessing the ITS, and the number of file pages allocated per user. The file page requirements and number of users were originally set when the service was first run and initialized (see the "Setting up your Interactive Terminal Service" chapter). These original limits can be changed by reconfiguring the ITS.

To change the values for number of users and allocated file space, stop all services, boot the server, run the ITS, and enter new values. Depending on your ITS configuration, you may have to repeat the following procedure for each server running ITS.

**Comment:** If your server supports multiple services, be sure you maintain enough space to support the other services. See specific service documentation for more information.

## Procedure

1. Type **Stop Service** and press < RETURN >.

2. Type the number corresponding to All Services and press < RETURN >.

3. Type **Y** to the "Stop immediately?" prompt and press < RETURN >. This automatically disconnects the users currently on the ITS. (If you enter **N**, the system waits until each user is logged off before allowing you to continue.)

4. Boot the server from 0001 by pressing both the ALT B and B RESET buttons and releasing B RESET while still pressing the ALT B button. Wait for the maintenance panel to cycle to 0001, and then release the ALT B button.

5. Type **N** to the "Normal Startup?" prompt and press < RETURN >.

6. Type the number corresponding to the "Interrupt before running services" option and press < RETURN >.

7. Log on and enable yourself.

```
> Logon RETURN
    User's Name: XXX RETURN
    Password: **** RETURN
> Enable RETURN
> Run Service RETURN
```

8. Type **Run Service** and press < RETURN >.

9.  Type the number corresponding to the Interactive Terminal Service and press <RETURN>.

10. Type **N** to the "Normal Startup?" prompt and press <RETURN>.  You will see this prompt:

ITS: This Interactive Terminal Service is configured for <*number*> users and <*number*> file pages per user.
Do you wish to change these values? (Y/N):

11. Type **Y** and press <RETURN>.  If you specify **N**, the current values are used.  If you specify **Y**, you are prompted for new values.

12. Enter the new values and press <RETURN> after each answer.

13. Type **Proceed** and press <RETURN> to complete the server initialization.

14. Log off from the server.

## Listing users

The command to list users enables you to see the state of each current user session. The information displayed on the screen includes who is logged on and the time the connection was made to the ITS.

**Comment:** If you want to look at user activity as it occurs, refer to the "Monitoring Interactive Terminal sessions" section.

## Procedure

1. Log on in the Interactive Terminal Service context.

```
>LogonRETURN
    User's Name: XXXRETURN
    Password: ****RETURN
>List UsersRETURN
```

2. Type **List Users** and press <RETURN>. The screen displays the name of the ITS and the names of users currently connected to it. The date and time represent the current logon.

```
ITS>List UsersRETURN
    The name of this ITS is:
    OurITS:OurDomain:OurOrg
    2 users connected to ITS. ITS is currently started.
    User Tom Magnus logged on since July 26, 84 11:37:40.
    User Jennifer Douglas logged on since July 26, 84 11:38:20.
ITS>
```

3. Log off from the Interactive Terminal Service context.

# Renaming the Interactive Terminal Service

The name of the Interactive Terminal Service can be changed to reflect any changes in services location within your organization. The name of the Interactive Terminal Service was originally given when the service was first run and initialized (see the "Setting up your Interactive Terminal Service" section). The name can be changed by using the **Rename** command.

You must be an enabled System Administrator to perform this task, and the service must be started.

## Procedure

1. Log on and enable yourself in the Interactive Terminal Service context.

```
> LogonRETURN
    User's Name: XXXRETURN
    Password: ****RETURN
> EnableRETURN
!Interactive Terminal ServiceRETURN
ITS!
```

2. Type **Rename** and press < RETURN >.

3. Respond to the prompts to enter your new service name and description, and press < RETURN >.

4. Type **Y** to confirm the new information and press < RETURN >. The software registers the Interactive Terminal Service in the appropriate Clearinghouse domain.

```
ITS!RenameRETURN
    ITS: Deleting Clearinghouse entry for OurITS:OurDomain:OurOrg
    ITS: Done
    ITS: Warning - Service name and description unknown.
        Enter Service Name: NewITSRETURN
        Enter service description: ITS with a new nameRETURN
        Confirm? (Y/N): YRETURN
    ITS: Validating Clearinghouse entry for: NewITS:OurDomain:OurOrg
    ITS: A new Clearinghouse entry was created.
    ITS: Done
```

5. Log off from the Interactive Terminal Service context.

# Removing the Interactive Terminal Service from a server

If you need to permanently remove the Interactive Terminal Service from a server, use the **Expunge Service** command. This command returns server resources (such as disk space) acquired by the Interactive Terminal Service, back to the server.

You must be an enabled System Administrator to perform this task, and all services running on the server must be stopped.

## Procedure

1.  Boot the server supporting the Interactive Terminal Service by pressing the B RESET button.

2.  Type **N** to the "Normal Startup?" prompt and press <RETURN>.

3.  Type the number corresponding to the "Interrupt before running services" option and press <RETURN>.

*Note:* If the Clearinghouse Service for the network resides on a different server than the ITS, you must log on and enable yourself in the Clearinghouse context. If the Clearinghouse and ITS are on the same server, skip step 4.

4.  Log on and enable yourself in the Clearinghouse Service context.

5.  Type **Expunge Service** and press <RETURN>.

6.  Type the number corresponding to the Interactive Terminal Service and press <RETURN>.

7.  Type **Y** to confirm the deletion and press <RETURN>.

8.  Boot the server a second time.

9.  Type **Y** to the "Normal Startup?" prompt and press <RETURN>.

This section contains all error or informational messages that you may get during the operation of your Interactive Terminal Service. They are listed in alphabetical order. If the probable cause of the message is not evident by the message text, it is given next to the heading: *Probable cause.* If the message is such that action can be taken to resolve the situation, the action is listed next to the heading: *Action.* Messages not requiring action are called informative messages.. Any message that begins with <number> can be found at the end of this section.

When you see an error or informational message that you do not understand or want additional information about, write it down and contact the Network Support Center. Also, check the *Basic Troubleshooting of Network Services* booklet in the *Network Basic Services* volume for information on diagnostics and testing.

**ITS: Interactive Terminal Service is initializing.**
**ITS: Interactive Terminal Service is initialized.**
**ITS: This Interactive Terminal Service is configured for <n> users and <m> file pages per user.**

---

These are informative messages issued during startup and shutdown.

**ITS: Interactive Terminal Service already stopping.**

---

This message may appear in response to a **Stop Service** command when the service is already stopping. However, some remote users may be logged on, preventing the service from stopping completely. At some point, all remote users will be logged off and will not be allowed to connect to the ITS until an enabled System Administrator starts the service.

**ITS: Interactive Terminal Service is started.**

---

The Interactive Terminal Service is fully operational and ready for use. Sessions can be initiated by remote users.

**ITS: Interactive Terminal Service is stopped.**

---

The Interactive Terminal Service is completely stopped. It will not accept requests for connection from remote users, until a request to start service has been made by an enabled System Administrator.

## ITS:  Interactive Terminal Service not product factored.

**Probable cause:** This error message follows an automatic start or an explicit **Start Service** command when the Interactive Terminal Service has not been installed on that server.

**Action:** Refer to the *Server Software Installation* booklet for more information on product factoring.

## ITS:  Interactive Terminal Service not started logon and start service.

In order to perform the required operation, you must log on and start the service.

## ITS:  Interactive Terminal Service stopping.

The **Stop Service** command has been issued, but active user sessions still exist.  New remote user sessions will not be established.  When the last active remote user logs off, the service will stop.  The remote users will not be allowed to connect to the ITS until an enabled System Administrator starts the service.

## ITS:  Heap error.

**Probable cause:**  This message indicates that the internal consistency of the service has been compromised.

**Action:**  Stop services and reboot the server as soon as possible.  Refer to the *Server Software Installation* booklet for more information.

## ITS:  Insufficient space on the system volume.

**Probable cause:**  This message indicates that the internal consistency of the service has been compromised.

**Action:**  Stop services and reboot the server as soon as possible.  Refer to the *Server Software Installation* booklet for more information.

## ITS:  <timestamp>:  session <number> created.

Informative message issued in response to the **Set Tracing** command.  The Interactive Terminal Service has just established a connection.  A number between 0 and 7 is assigned to the session and will be used in all subsequent messages referring to this session.

## ITS: <timestamp>: session <number> session ending due to heap error.

Informative message issued in response to the **Set Tracing** command.

**Probable cause:** A session is being terminated (whether a remote user is logged on or not) because the service does not have enough resources.

**Action:** The remote user should log back on to the server to clear the problem.

## ITS: <timestamp>: session <number> session ending due to insufficient space on the system volume.

Informative message issued in response to the **Set Tracing** command.

**Probable cause:** A session is being terminated (whether a remote user is logged on or not) because the service does not have enough resources.

**Action:** The remote user should log back on to the server to clear the problem.

## ITS: <timestamp>: session <number> <user name> - connection lost.

**Probable cause:** The connection between the Interactive Terminal Service and the remote user terminal has been broken. This can be due to a malfunction in the phone line, modem, or system.

**Action:** The user should log back on to the service. Refer to the *Basic Troubleshooting of Network Services* for more information.

## ITS: <timestamp>: session <number> <user name> - connection terminated by Operator.

Informative message issued in response to the **Set Tracing** command. The connection is being terminated by the System Administrator stopping the service and disconnecting the remote active users.

## ITS: <timestamp>: session <number> <user name> ended.

Informative message issued in response to the **Set Tracing** command. The session is completely finished. The connection is broken, and there are no resources allocated in the Interactive Terminal Service for this session.

## ITS: <timestamp>: session <number> <user name> inactive too long; issuing disconnect.

Informative message issued in response to the **Set Tracing** command. The remote user is being disconnected after remaining inactive for 10 minutes.

## ITS: <timestamp>: session <number> <user name> logged off.

Informative message issued in response to the **Set Tracing** command. The remote user has logged off the Interactive Terminal Service. The session should end shortly.

## ITS: <timestamp>: session <number> <user name> logged on.

Informative message issued in response to the **Set Tracing** command. The remote user has successfully logged on at this Interactive Terminal Service.

## ITS: <timestamp>: session <number> <user name> unusual end.

Informative message indicating the session has ended in a way other than by the remote user logging off.

## ITS: Warning: ITS could not locate the Terminal Description File. Contact your System Administrator.

**Probable cause:** This error message follows an automatic start or an explicit **Start Service** command. The Interactive Terminal Service is allowed to start, using default translation tables suitable for U.S. ASCII terminals.

**Action:** The installation procedure for the ITS must be repeated. Refer to the *Server Software Installation* booklet for more information.

## Name contains an invalid organization or domain specified.

**Probable cause:** The Greeter cannot locate the service name specified because the organization or domain specified in the name does not exist. If the remote user did not specify a domain and organization, the default domain and organization for the Greeter may be invalid.

**Action:** Try entering the full name of the service desired, including the domain and organization. If this corrects the error, correct the default domain and organization.

## Name is not registered in Clearinghouse.

**Probable cause:** The Greeter cannot locate the specified service name in the Clearinghouse database.

**Action:** The remote user should re-enter the correct data as requested, or type an asterisk to see a list of known names.

## Name is registered in Clearinghouse, but not as specified service type.

**Probable cause:** The Greeter found the specified service name in the Clearinghouse Service, but the name is not registered as the requested service type.

**Action:** The remote user should re-enter the correct data as requested, or type an asterisk to see a list of known names.

## Service did not respond to connection request.

**Probable cause:** When the Greeter attempted to connect to the service requested by the user, the service did not respond. The service may be down, or the network connection may be inoperative.

**Action:** The remote user should try again later, or connect to another service.

## Service is not available at this time.

**Probable cause:** When the Greeter attempted to connect to the service, the server indicated that it did not provide the requested service. Either the service has been stopped, or the service name is incorrectly registered in the Clearinghouse Service.

**Action:** The remote user should try again later, or connect to another service.

## Service is too busy to accept new connections.

**Probable cause:** When the Greeter attempted to connect to the service, the service indicated that it could not accept new users at this time.

**Action:** The remote user should try again later, or connect to another service.

## Set tracing not available, too many users tracing.

Informative message that occurs when a System Administrator tries to enable the tracing option when there are already four System Administrators enabled with the option.

## The name of this ITS is:
### <service name:domain:organization>

This is the header to the **List Users** command response.

## <user name> logged on and session being aborted.

Informative message issued in response to the **List Users** command regarding remote logged-on users. A user is still logged on, but the System Administrator has stopped the service, disconnecting active users. The user will be logged off shortly.

## <user name> logged on and session ending.

Informative message issued in response to the **List Users** command regarding remote logged-on users. A user is in the process of logging off.

## <user name> logged on and session starting.

Informative message issued in response to the **List Users** command regarding logged-on users. A remote user logged on, but the initial prompt has not appeared on the user console yet.

## <user name> logged on since <timestamp>.

Informative message issued in response to the **List Users** command regarding remote logged-on users. This is the normal state for an active, logged-on user.

## User not logged on and insufficient space on the system volume during create.

Informative message issued in response to the **List Users** command while a session exists, but a user is not logged on. A session exists when the remote user has established connection with the Interactive Terminal Service, even if the **Logon** command has not been used.

## User not logged on and session being aborted.

Informative message issued in response to the **List Users** command while a session exists, but a user is not logged on. A session exists when the remote user has established connection with the Interactive Terminal Service, even if the **Logon** command has not been used.

## User not logged on and session ending.

Informative message issued in response to the **List Users** command while a session exists, but a user is not logged on. A session exists when the remote user has established connection with the Interactive Terminal Service, even if the **Logon** command has not been used.

## User not logged on and session is being created.

Informative message issued in response to the **List Users** command while a session exists, but a user is not logged on. A session exists when the remote user has established connection with the Interactive Terminal Service, even if the **Logon** command has not been used.

## User not logged on and session is being initialized.

Informative message issued in response to the **List Users** command while a session exists, but a user is not logged on. A session exists when the remote user has established connection with the Interactive Terminal Service, even if the **Logon** command has not been used.

## User not logged on and session starting.

Informative message issued in response to the **List Users** command while a session exists, but a user is not logged on. A session exists when the remote user has established connection with the Interactive Terminal Service, even if the Logon command has not been used.

## <number> users connected to ITS. ITS is currently initializing.

Informative message issued in response to the **List Users** command.

## <number> users connected to ITS. ITS is currently started.

<Number> remote users are currently connected to the Interactive Terminal Service. The Interactive Terminal Service is fully operational and will accept new users.

## <number> users connected to ITS. ITS is currently stopping.

<Number> remote users are currently connected to the Interactive Terminal Service. The Interactive Terminal Service is stopping, so new connections will not be accepted. When the number of users reaches zero, the Interactive Terminal Service stops.

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**Asynchronous**    Transmission of data in which time intervals between transmission are unequal. Transmission is sent a character at a time and is controlled by start and stop elements at the beginning and end of each character.

**Clearinghouse Service**    **(CHS)** A lookup directory service that maintains a database of all users, services, and servers in a network. The Clearinghouse Service cooperates to provide a single unified database system among other Clearinghouse Services.

**Domain**    A logical grouping (usually geographical) of registered objects in the Clearinghouse database. Domains serve as units of name, scope, administrative responsibility, and replicated database configuration. The data maintained for a particular domain includes the list of administrators of that domain, plus the names and relevant information about all objects that are registered in the domain.

**File Service**    **(FS)** A service installed on the server that allows the sharing of files produced at any networked or non-networked workstation. The information is stored in a hierarchy of file drawers and folders. There is a limit to the size of the file drawer as established by the System Administrator, but there are no limits to the number of file folders within the size of the file drawer. The File Service is also used to back up the Clearinghouse, Server Monitor, and Mail services.

**Interactive Terminal Service**    **(ITS)** Provides access to Mail, Print, and File services for non-networked users of TTY-like terminal or personal computers emulating teletypewriters. The remote user communicates with the ITS through a modem and phone, and is validated through the Clearinghouse Service.

**Mail Service**    **(MS)** The Mail Service is directly accessible to all networked workstations, and to any non-networked device that can dial-up the appropriate compatibility service. There are two compatiblity services: 850/860 Gateway and the Interactive Terminal Service. The Clearinghouse provides address information and distribution lists for mail delivery. The Internetwork Routing Service routes messages to other networks.

| | |
|---|---|
| ***Organization*** | A high-level logical grouping of domains in the Clearinghouse database (usually corresponding to an entire company or equivalent). Most internetworks contain only a single organization. For each organization which it serves, a Clearinghouse Service maintains the following data: the list of administrators for that organization, the list of all domains contained by the organization, and the names of all Clearinghouse Services that serve each of these domains. |
| ***Print Service*** | **(PS)** Provides the resource for obtaining printed output of documents for clients accessing the network. |
| ***System Administrator*** | A user, with specific network privileges, responsible for setting up and maintaining the network services. |
| ***XModem protocol*** | An asynchronous communication protocol developed to facilitate file transfers between personal computers. It has been implemented for use in a variety of personal computers as well as mainframe computers. The XModem protocol demands eight data bits, no parity, and one stop bit. |

This section contains a form that you will need when initializing the Interactive Terminal Service. You may want to make copies of it and fill them out by hand. It is important to update the forms with service or network configuration changes as they occur.

- ITS Form 1. Directory of Services on a Specific Server

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