

jBASE 5.5.1 Linux Installation Guide




DOCUMENT SCOPE

These instructions describe the system requirements and process for installing and initial configuration of jBASE 5.5.1 on Linux operating systems.

ABOUT THE JBASE DATABASE MANAGEMENT SYSTEM

Welcome to the exciting world of MultiValue, with jBASE, a game changing database management system that combines scalability, performance and a small footprint with proven rich features and legendary flexibility to bring your business applications into the future.

SYSTEM REQUIREMENTS

-  jBASE 5.5.1 for Linux is officially supported on 64-bit versions of CentOS 5 or above and Red Hat Enterprise Linux 5 or above. If installed on other distributions you may receive a warning but allowed to continue, however prerequisites will not be installed on unsupported operating systems.

Root Access

1. This document assumes you have superuser (su) or root access to the computer. Root or superuser commands will be represented with the pound sign or hash (#) character.
2. To gain root or superuser access, login to your system as root, or from a terminal prompt, type the (su) command.

```
$ su
```

3. Enter the root password when prompted, and you will notice the command prompt changes to a pound or hash (#) sign.

```
[joe@localhost ~]$ su  
Password:  
[root@localhost joe]#
```

Determining Operating System Version

1. To determine the operating system version, run the (uname -a) command from the terminal as root.

```
# uname -a
```

2. You should see this information displayed, x86_64 indicates this is a 64-bit version of Linux.

```
[root@localhost joe]# uname -a
Linux localhost.localdomain 3.10.0-327.28.2.el7.x86_64 #1 SMP Wed Aug 3 11:11:39
UTC 2016 x86_64 x86_64 x86_64 GNU/Linux
[root@localhost joe]#
```

Disk Space Requirements

1. jBASE 5.5.1 for Linux requires the same minimum hardware specifications as the host operating system plus a minimum of 500MB of additional hard disk space, plus space for temporary files.

2. To determine disk space, run the df -h command.

```
[root@localhost joe]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/mapper/centos-root 18G  5.2G  13G  30% /
devtmpfs        1.9G   0  1.9G   0% /dev
tmpfs           1.9G 100K  1.9G   1% /dev/shm
tmpfs           1.9G 152M  1.8G   8% /run
tmpfs           1.9G   0  1.9G   0% /sys/fs/cgroup
/dev/sda1       497M  211M  286M  43% /boot
tmpfs           380M  4.0K  380M   1% /run/user/42
tmpfs           380M  28K  380M   1% /run/user/1000
tmpfs           380M   0  380M   0% /run/user/0
[root@localhost joe]#
```

3. In this example this volume has 13GB free.

LICENSE INFORMATION

To install jBASE 5.5.1 for Linux, you will need the Linux_jBASE_5.5.1.xxx_rel_64bit.bin file, license key and root or su permissions as discussed in the previous section. You will receive an email with download links to the various jBASE installers and an html attachment containing licensing key information.

In order to complete the installation, you will need to enter your jBASE license key. jBASE cannot be installed without either a permanent or evaluation license key. If you are performing an

upgrade, the installer will attempt to locate your existing license keys and allow you to reuse them.

- i** For licensing assistance contact jBASE support in the United States at 866 582 8447 and in the United Kingdom at 0808 189 3266 or sales@jbase.com.

License Information



PREREQUISITES

Required Components

- i** The jBASE installer will check for the following required packages and install them automatically:
 - openssl
 - gcc
 - ksh
 - ncurses-devel

Installer Binary

1. Download the jBASE 5.5.1 installer and place the installer in a convenient directory, for example, /tmp.



Installer file permissions

1. Ensure that the installer is executable. Depending on the source of the installer file, most likely the execute mode of the installer file may have been lost. Use the chmod to change permissions.

2. First cd to the directory where the installer is located:

```
# cd /tmp
```

```
[root@localhost ~]# cd /tmp
```

3. Run chmod +x command to enable the file to be executed.

```
# chmod +x Linux_jBASE_5.5.1.18496_rel_64bit.bin
```

```
[root@localhost tmp]# cd  
[root@localhost ~]# cd /tmp  
[root@localhost tmp]# chmod +x Linux_jBASE_5.5.1.18496_rel_64bit.bin  
[root@localhost tmp]#
```

4. Run ls -l command to verify the permissions.

```
# ls -l Linux_jBASE_5.5.1.18496_rel_64bit.bin
```

```
[root@localhost tmp]# cd
[root@localhost ~]# cd /tmp
[root@localhost tmp]# chmod +x Linux_jBASE_5.5.1.18496_rel_64bit.bin
[root@localhost tmp]# ls -l Linux_jBASE_5.5.1.18496_rel_64bit.bin
-rwxrwxr-x. 1 joe joe 56666630 Oct  2 18:40 Linux_jBASE_5.5.1.18496_rel_64bit.bi
n
[root@localhost tmp]#
```

INSTALLATION

Starting the Installation

The jBASE 5.5.1 installer is an interactive script-based installer. The installer will prompt you with various questions about the installation and after all of the information has been gathered, it will perform the installation automatically.

1. Launch the installer by typing `./` and then the install file name. Then press Enter.

```
# ./Linux_jBASE_5.5.1.18496_rel_64bit.bin
```

```
[root@localhost tmp]# ./Linux_jBASE_5.5.1.18496_rel_64bit.bin
```

2. The installer checks operating system compatibility, then verifies that all of the required Linux commands used during installation are available. Once the pre-installation tests are complete, a welcome message is displayed. Press enter to start the installation.

```
-----  
jBASE Release 5.5.1 Installation  
-----
```

```
You are about to install the jBASE MultiValue Database. During this  
process you will be asked to provide:
```

- * The target directory for this release and the symbolic link to that directory
- * The Unix user and group which own the jBASE system files
- * Either an evaluation or permanent licence key
- * Optional: - JBASEADM account directory
 - path for jBASE SYSTEM file
 - TCP port number for jRCS server
 - jDLS options
 - directory for jBASE spooler

```
The installation process will make the following updates to the system:
```

- * Install pre-requisites needed for jBASE: ksh, gcc, ncurses-devel, libcrypto
- * The jBASE system files will be placed in the release directory.
- * A symbolic link will be added to that release directory.
- * If the user and/or group do not exist, they will be created, along
 with the user's home directory.

```
Press <Enter> to start the installation process or [C]ancel █
```

3. Type W if your company is within the EU, otherwise type O if outside the EU. Then press Enter.

```
-----  
Company Location and License Agreement  
-----
```

```
Company is registered <O>outside the EU, [W]ithin the EU or [C]ancel :
```

4. Press spacebar to page down through the license agreement, then type YES to accept and continue.

dict of laws provisions, and any action brought regarding this Agreement must be filed exclusively in the state or federal courts located in Orange County, California, U.S.A.; (f) will be construed as severable, so the invalidity or unenforceability of any provision will not affect the validity or enforceability of any other provision of this Agreement; and (g) has been entered into with the authority of Licensee and is legally binding on Licensee.

12.2 If Licensee issues a purchase order regarding the Software, the purchase order will be for Licensee's administrative convenience only and will not constitute part of this Agreement or an amendment to this Agreement.


12.3 This Agreement is in the English language, and its English language version will be controlling over any other translation except as otherwise required by applicable law.

13. Contact Information. If there are questions about this Agreement, please contact Licensor at:

jBASE International, Inc.
9245 Research Drive
Irvine, CA 92618
(503) 290-1200

To continue, type "YES" to accept the agreement, or "NO" to exit:

5. Choose an installation type.

 jBASE provides two installation modes, [Express](#) and [Advanced](#).

Express: install jBASE with typical options and services. Select this option if you are new to jBASE and wish to get started quickly. Express mode installs jBASE, creates a jBASE Administrator user and account, creates a SYSTEM file to organize jBASE accounts, initializes the spooler, installs and starts jBASE services.

Advanced: allows you to select which features and services to install. Select this option if you need to customize the location of the SYSTEM file, administrator account, or jBASE spooler, or if you do not want some of these features installed. Also select this option to select which optional services to install (jDLS and jRCS).

```
-----  
Type of Installation  
-----  
[E]xpress : Install jBASE with typical options and services  
[A]dvanced : Select components to install and services to start  
  
[C]ancel installation  
  
Install type:
```

6. Type an installation path or press Enter to choose the default /opt/jbase/5.5.1 directory.

Applies to: [Express Advanced](#)

```
-----  
Release Directory  
-----  
Please specify the directory to install jBASE, or press <Enter> to accept  
the default directory: /opt/jbase/5.5.1  
  
Release directory: █
```

7. If the installer is able to locate an existing jBASE installation, the previous release directory will also be shown on this page. The installer will look for existing installations at the location pointed to by the JBCRELEASEDIR environment variable, as well as commonly used directories for past jBASE releases.

The default installation directory is /opt/jbase/<release number>.

The installer will validate the specified installation directory. If it is a new directory, or an empty directory, installation may proceed. If the directory exists and contains a jBASE installation of the same release as the one being installed, the installation may proceed. Otherwise a different directory must be selected.

If you are performing an Express mode install, the parent of the installation directory will be used as the location for the SYSTEM file, the JBASEADM account and jBASE spooler. For example, if jBASE is installed in the default directory, the parent is '/opt/jbase', so the SYSTEM file will be created as '/opt/jbase/SYSTEM'.

8. Then press Y and then Enter to confirm.

```
jBASE release 5.5.1 will be installed in: /opt/jbase/5.5.1  
  
Is this OK? ([Y]es/<N>o/[C]ancel):
```


9. Specify a name for a symbolic link for the new release or press Enter to accept the default. The symbolic link name is typically used for the JBCRELEASEDIR environment variable. For jBASE 5.5.1, the default symbolic link name is 'CurrentVersion'.

If the installer identified a previous jBASE release, the symbolic link name for the previous release will also be displayed. If you have existing scripts that rely on the previous symlink name, you may want to use the same name here to avoid having to update any existing scripts.

Express install will use the default symbolic link name 'CurrentVersion'.

Applies to: Express [Advanced](#)

```
-----  
Symbolic Link (JBCRELEASEDIR)  
-----  
  
Please specify the symbolic link for the jBASE release  
directory (JBCRELEASEDIR). Press <Enter> to accept the  
default symbolic link: /opt/jbase/CurrentVersion  
  
Symbolic link:
```

10. Then press Y to confirm.

```
Symbolic link to JBCRELEASEDIR: /opt/jbase/CurrentVersion  
  
Is this OK? ([Y]es/<N>o/[C]ancel):
```

11. Specify a Linux user ID to own the jBASE system files, or press Enter to accept the default jbaseadm user account. If the user does not exist, the installer will create the user for you. Press Y to confirm.

Applies to: [Express Advanced](#)

```
-----  
jBASE User ID  
-----  
  
Please specify the Linux user ID to own the jBASE system files,  
or press <Enter> to accept the default jBASE user ID: jbaseadm  
  
Select jBASE user ID:  
  
User id "jbaseadm" does not exist. Create new user? ([Y]es/<N>o/[C]ancel): █
```

12. Enter a password for the Linux user, and again for verification.

Applies to: [Express Advanced](#)

```
Password for "jbaseadm":  
Again for verification :
```

13. Specify a group ID for the jBASE system files, or press Enter to accept the default jbase group ID. Then press Y to confirm.

Applies to: [Express Advanced](#)

```
-----  
jBASE Group ID  
-----  
Please specify the group ID for the jBASE system files,  
or press <Enter> to accept the default group ID: jbase  
  
Select jBASE group ID:  
Group ID "jbase" does not exist. Create new group? ([Y]es/<N>o/[C]ancel): █
```

14. Here you can choose optional tasks to complete during installation, or choose the default to complete all tasks. Options include:

Create JBASEADM account for administrative functions The JBASEADM account can be used to perform jBASE administrative tasks such as creating or deleting other jBASE accounts.

Create SYSTEM file to organize jBASE accounts In jBASE, the SYSTEM file is optional. However, using a SYSTEM file provides a convenient way to organize your jBASE accounts, and is required for using Q-pointers and the LOGTO command in your jBASE applications.

Start jDLS distributed locking service jDLS is responsible for resolving all record locking conflicts for jBASE processes. If jDLS is not running, jBASE will use the normal operating system locks. This is acceptable for small user populations, but the operating system locking mechanism has limits on the number of locks available, and on performance. See the [jBASE Distributed Locking User Guide](#) for more information regarding jDLS.

Start jRCS remote connectivity service The jBASE Remote Connectivity Server (jRCS) provides remote access to your jBASE system. jBASE System Manager uses this service to perform management tasks on your jBASE system. By default, the jRCS server listens on TCP port 8236. See the [jBASE Remote Connectivity Service knowledgebase article](#) for more information regarding jRCS.

Initialize the print spooler Select this option to initialize the default print spooler configuration after a new installation. For upgrade installations, this option will restart the print spooler instead.

Applies to: Express [Advanced](#)

```
-----  
Optional Tasks  
-----  
[X] 1. Create JBASEADM account for administrative functions  
[X] 2. Create SYSTEM file to organize jBASE accounts  
[X] 3. Start jDLS distributed locking service  
[X] 4. Start jRCS remote connectivity service  
[X] 5. Initialize the print spooler  
  
Enter number to toggle, [N]ext or [C]ancel:
```

15. Please specify the directory where jBASE user data will be stored, or press Enter to accept the default directory: /opt/jbase. Then press Y to accept the directory.

Applies to: Express [Advanced](#)

```
-----  
Directory for jBASE Data  
-----  
Please specify the directory where jBASE user data will reside.  
The jBASE data directory (JBCDATADIR) is the location where setup  
will create the SYSTEM file, spooler directory and the jBASE  
Administrator account (if those options are selected). By default  
this is where new account directories will be created.  
  
Press <Enter> to accept the default directory: /opt/jbase  
  
jBASE data directory:  
  
The jBASE data files will be created in /opt/jbase  
  
Is this OK? ([Y]es/[N]o/[C]ancel): █
```

16. In order to complete the installation you will need to enter your jBASE license key. jBASE cannot be installed without either a permanent or evaluation license key. If you are performing an upgrade, the installer will attempt to locate your existing license keys and allow you to reuse them. Type the letter for the license type and enter the license key to continue.

Applies to: [Express](#) [Advanced](#)

```
-----
License Keys
-----

[E]valuation license   :
[S]ystem license      :
[M]ulti-session license :
[W]eb session license  :

Enter license type to edit, or [N]ext or [C]ancel E

Enter evaluation license key: [REDACTED]
```

17. Specify the TCP port to use for the jBASE Remote Connectivity Server (jRCS), or press Enter to use the default port 8236. Then press Y to accept.

Applies to: Express [Advanced](#)

```
-----
jRCS TCP Port Number
-----

Specify the TCP port to use for the jBASE Remote Connectivity Server
(jRCS). Press <Enter> to accept the default TCP port 8236.

jRCS TCP port number:

jRCS server will be installed on TCP port 8236

Is this OK? ([Y]es/<N>o/[C]ancel) █
```

18. If you opt to start the jDLS service, you can select port-based or process-based locks or press Y to choose the default process-based locks. See the [jBASE Distributed Locking User Guide](#) for more information regarding jDLS.

Applies to: Express [Advanced](#)

```
-----
jDLS (Distributed Locking Service) Options
-----

jBASE locks can be maintained on a per-process or per-port basis.

jBASE will use process-based locks. OK? ([Y]es/[N]o/[C]ancel): Y █
```

19. After verifying the information displayed on the summary page, type Y to begin the installation process. The following tasks will be completed.

Applies to: [Express Advanced](#)

- Shut down jBASE daemons and ensure that no processes are using jBASE files
- Check for required packages and install any that are missing
- Backup the config directory from a previous installation
- Copy the jBASE release files to the destination directory
- Install the license keys in the 'system.properties' file
- Validate that jBASE is functional by executing a simple command (TERM)
- Create the jbaseadm user and jbase group, if needed
- Create a jbase_env.sh script in the release directory to help with jBASE configuration
- Create the SYSTEM file (if option is selected)
- Initialize the spooler (if option is selected and performing a new install)
- Create the JBASEADM account (if option is selected)
- Update /etc/init.d with scripts to start jDLS, jRCS, jSPOOL daemons (if option is selected)

```
-----
Installation Summary
-----
Release directory      : /opt/jbase/5.5.1
Symbolic link         : /opt/jbase/CurrentVersion
Data directory        : /opt/jbase

jBASE admin user      : jbaseadm  [will create]
jBASE group           : jbase    [will create]

SYSTEM file           : /opt/jbase/SYSTEM  [will create]
JBASEADM account      : /opt/jbase/JBASEADM  [will create]


Spooler directory     : /opt/jbase/jspooler  [will initialize spooler]

Start jDLS             : Y
jRCS TCP Port         : 8236

Evaluation License     : L7G3Jq52/AVFKZjLMDCWgmjNthlH2a/m

Begin installation? ([Y]es/[N]o) :Y
```

20. Congratulations, jBASE 5.5.1 is now successfully installed. Press Y to login as JBASEADM.

 If you have a local firewall installed on this server, it may prevent network users from connecting to the application. Your system administrator may need to allow access to TCP port 8236.

Applies to: [Express Advanced](#)

```

-----
Installation Complete
-----
jBASE release 5.5.1 is now installed.

You may want to restart the server if you changed options on jDLS
or added any new licenses.

-----

NOTE ABOUT FIREWALLS:
If you have a local firewall installed on this server, it may
prevent network users from connecting to the application. Your
system administrator may need to allow access to TCP port 8236.

Would you like to log in to JBASEADM now? ([Y]es/⟨N⟩o) Y

[ 417 ] File /opt/jbase/CurrentVersion/tmp/jutil_ctrl]D created , type = J4
[ 417 ] File /opt/jbase/CurrentVersion/tmp/jutil_ctrl created , type = J4
jsh JBASEADM ~ -->

```

Upgrading from a Previous Version

The jBASE installer will examine the directory pointed to by the JBCRELEASEDIR environment variable for a previous jBASE installation. If JBCRELEASEDIR does not point to a valid jBASE installation, the installer will test common installation locations for previous jBASE versions. The 'jdiag' command is used to that the directory contains a jBASE installation, as well as the previous jBASE release number.

If a previous jBASE release is found, the contents of the previous release 'config' directory will be backed up to 'config_pre_<new version>' in the destination directory. For example, if, prior to installing this release of jBASE, JBCRELEASEDIR points to '/opt/jbase5/5.2' and the new installation destination directory is '/opt/jbase/5.5.1', then the contents of '/opt/jbase5/5.2/config' will be backed up as '/opt/jbase/5.5.1/config_pre_5.5.1'.

If you have modified any of the configuration files in the previous release 'config' directory, you will need to apply your modifications to the corresponding files in the new installation 'config' directory. Such files may include:

Config_EMULATE - Contains the JBCEMULATE settings

Config_TERM - Contains translations from PICK TERM to linux TERM items

jediLoggerAdminLog, jediLoggerConfig, jediLoggerTransLock - Contains TJ log parameters

jnet_access, jnet_config, jnet_env, jnet_map, jrfs_config - jRFS configuration files

jspjobs_config, jspform_deflt, jspxl_deflt - jBASE spooler config files

jLibDefinition - Define shared object items

When upgrading a previous release of jBASE, the installer will not overwrite any existing jBASEADM account, SYSTEM file or jBASE Spooler configuration.

Manual License Installation

License keys for jBASE 5.5.1 need to be added to the 'system.properties' file which is located in the 'config' directory under your jBASE release directory. The jBASE installer will update the license keys during Express and Advanced mode install. If you need to change the keys, for example, to enter a permanent key instead of an evaluation key, you can use any text editor (vi, for example) to enter the keys in the 'system.properties' file. You should have either a permanent system license key, or an evaluation license key. You may also have a 'Multisession' and/or 'Websession' key. Each key must be added as a separate entry in the 'system.properties' file. New keys should be added at the end of the file, after the 'jruntime.license' line, which should be left in the file without modification. When the keys have been added, the last few lines of your 'system.properties' file will look something like this:

```
#####  
jruntime.license = qP2XhdjqbdbiqzvfDBgPisP3ITiDfhyT  
jruntime.azeroth= 5FLY3q6e4P6I1qdZLr2q4wadhM06VQvzoOGDVX0KZSs=  
jruntime.multisession=5FLY3q6e4P6vTff9AETIQYwyjTnxDVK6sS1uFVfPeFQ=
```

For further information on jBASE licensing see the jBASE Knowledgebase article [jBASE 5 Licensing](#)

Minimal Install


If you prefer to perform a minimal install for custom or troubleshooting purposes, the following command will minimally install jBASE as in previous versions:

```
# ./Linux_jBASE_5.5.1.xxxxx_rel_64bit.bin -- extractfiles
```

MANAGEMENT

jBASE Users

jBASE users are normal Linux users. The installer automatically creates a Linux user group called jbase. To create new Linux users joined to this group, follow the instructions below.

 It is recommended that all jBASE users belong to the 'jbase' group, as their primary group. That way, they not only have access to other files belonging to the 'jbase' group,

but any files they create will also belong to the 'jbase' group, and be accessible by other members of this group.

1. If you just completed the jBASE install above, exit out of the jSHELL prompt, by typing exit then Enter.

```
jsh JBASEADM ~ -->exit  
[root@localhost home]#
```

2. Run the useradd command to add a new Linux user called for example, jbaseuser. This can be any username you wish.

```
useradd -m -k /opt/jbase/CurrentVersion/src/skel -g jbase jbaseuser
```

```
jsh JBASEADM ~ -->exit  
[root@localhost home]# useradd -m -d /opt/jbase/CurrentVersion/src/skel -g jbase jbaseuser
```

3. Set the Linux password for the new user:

```
# passwd jbaseuser
```

```
[root@localhost home]# passwd jbaseuser  
Changing password for user jbaseuser.  
New password:  
Retype new password:  
passwd: all authentication tokens updated successfully.  
[root@localhost home]#
```

jBASE Accounts

Now that we have created a Linux user, in order to login to jBASE, we must create a corresponding jBASE Account.

1. From the root command prompt, launch the jSHELL prompt by typing jbase.

```
# jbase
```


2. If prompted, type JBASEADM for the username.

```
[root@localhost home]# jbase
Account name or path: JBASEADM
jsh JBASEADM ~ -->
```

3. You should now be back at the jSHELL prompt, type CREATE-ACCOUNT jbaseuser, or any account name to match the Linux user account you created in the previous section.

```
CREATE-ACCOUNT jbaseuser
```

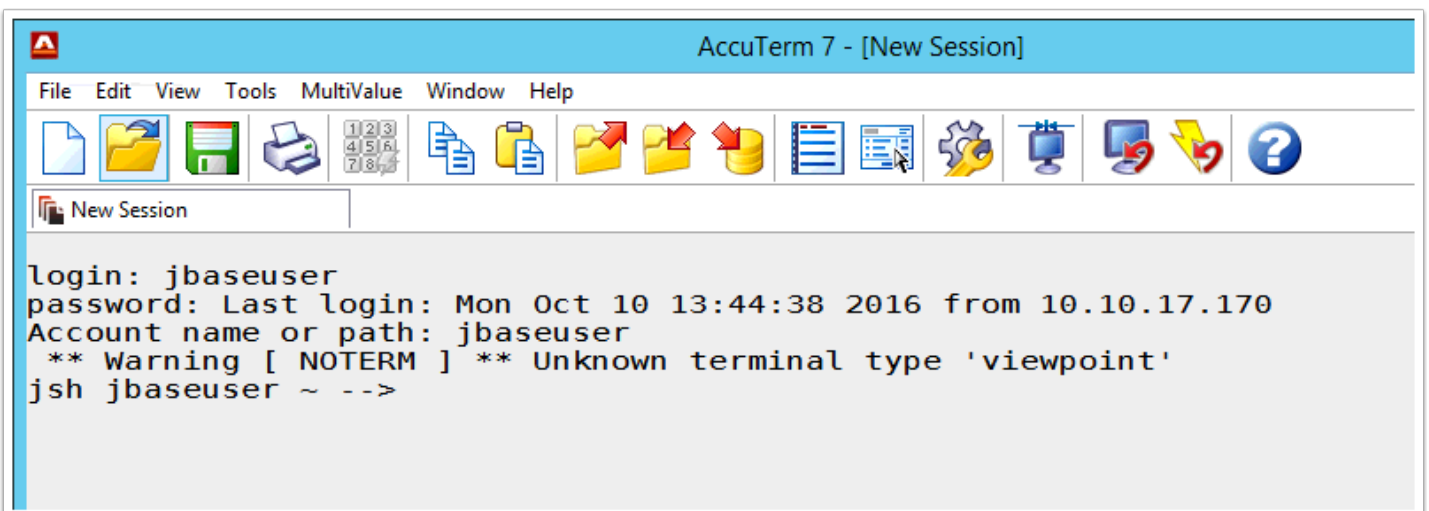
```
jsh JBASEADM ~ -->CREATE-ACCOUNT jbaseuser
jsh JBASEADM ~ -->
```

4. Congratulations, now you have created the corresponding jBASE Account.

5. You may now login to the jSHELL prompt as the user:

```
[root@localhost ~]# jbase
Account name or path: jbaseuser
jsh jbaseuser ~ -->
```

6. You may also connect remotely from another Linux OS or Windows, typically with SSH protocol and a terminal emulator such as AccuTerm or Putty. First you are logging in with the Linux User username and password. Then, the jBASE environment variables automatically launch the jSHELL prompt. If prompted, enter the jBASE account username to continue. You should now be at the jSHELL prompt.



The screenshot shows a terminal window titled "AccuTerm 7 - [New Session]". The window has a menu bar with "File", "Edit", "View", "Tools", "MultiValue", "Window", and "Help". Below the menu bar is a toolbar with various icons. The terminal content shows a login sequence: "login: jbaseuser", "password: Last login: Mon Oct 10 13:44:38 2016 from 10.10.17.170", "Account name or path: jbaseuser", a warning message: "** Warning [NOTERM] ** Unknown terminal type 'viewpoint'", and finally the jSHELL prompt: "jsh jbaseuser ~ -->".

SUPPORT

Contact jBASE support in the United States at 866 582 8447 and from the United Kingdom at 0808 189 3266. You may also email devsup@jbase.com and visit <http://www.jbase.com/support/> for more support options.

FURTHER READING

Further reading relating to jBASE and it's component technologies is available from the jBASE Knowledgebase.

jBASE Agent	Accepts and Processes incoming client requests
Value 1	jEDI Development Kit
jBASE JDBC Driver	Provides JDBC access to jBASE data files
jBASE ODBC Driver	Provides ODBC access to jBASE data files
Transaction Journaling	Logs jBASE database updates
jBASE Dataguard	Database Resilience within jBASE
jRCS	jBASE Remote Connectivity Service
jBASE Spooler	The jBASE Spooler
jSHELL	The jBASE Shell
mv.NET	Visual Studio development for MultiValue Data

GLOSSARY

jBASE

An open database product that brings the strengths of MultiValue technology into the mainstream computing market; providing a multidimensional database, a development environment including a development language, and a middleware component allowing other mainstream and standards-based products to communicate with the jBASE products.

jBASE Distributed Locking Service (jDLS)

jDLS is responsible for resolving all record locking conflicts for jBASE processes. It runs in the background on your system and is commonly referred to as the lock daemon.

If jDLS is not running, jBASE will use the normal operating system locks. This is acceptable for small user populations, but the operating system locking mechanism has limits on the number of locks available, and on performance.

jBASIC

The language built in to jBASE, jBASE BASIC (jBC) is a dialect of BASIC that combines the power of stored procedure languages with a fully-fledged development language.

jCL

The jBASE Command Language is an implementation of the PROC processor found in other multivalue offerings. The jCL processor stores a complex series of commands that can be executed later by a single word or command, but does not require any compilation.

jED

The jBASE Editor. jED is a fully featured screen editor, which can be used for creating, modifying, or deleting records.

jEDI

The jBASE External Device Interface(jEDI). The jEDI enables applications to achieve seamless integration with foreign databases without changes to the jBASE MultiValue BASIC application code and logic. [JEDIFILENAME_SYSTEM](#)

jLP

The jBASE spooler program. This is the jBASE equivalent of the unix lp command.

jPLUS

jPLUS files provide large file support on 64 bit UNIX and Windows platforms, such that Hash files can extend beyond the normal 2GB operating system limit.

jQL

The jBASE Query Language (jQL) is a powerful and easy to use facility which allows you to retrieve data from the database in a structured manner and to present the data in a flexible and easily understood format.

jRCS

The jBASE Remote Connectivity Server. jRCS runs as a Windows service and provides jBASE functions to remote programs. jBASE System Manager uses jRCS to perform its management tasks.

jServControl

A jBASE command line utility allowing the install, configuration and removal of jBASE services

JSH.exe

A windows executable that initiates a jSHELL session.

jshmd

jBASE service that initiates the required areas of shared memory for systems which utilise operating system locking.

jSHELL

The jBASE shell. It can be invoked as your login shell by using the normal system administration software supplied with the platform. Either via .bat files (Windows) or .profiles (Unix).

Environment Variables

jBASE uses a number of environment variables to modify jBASE behaviour

HOME

The 'HOME' environment variable. This stores the pathname of user home directory

Multisession

A Multisession license allows for up to ten concurrent sessions from a single IP address or system name to the database.

System.Properties

The 'system.properties' file resides in the %JBCRELEASEDIR%\config directory and stores jBASE license keys and compiler instructions.

Websession

A Websession license allows up to a ten sessions originating from a Web Server or Terminal Server (single IP address). For example with three of these licenses the Web Server would have 30 concurrent sessions available.