Streamline Userland Installation On FreeBSD Jails Using Sysinstall

 There is probably a dozen of ways to install the userland for use within a FreeBSD jail.

Most of the documentation I saw (including the man page itself) refers to building/installing from the source tree. Sysinstall seems only to be considered for additional post-configuration tasks and is always run inside of the jail.

While building/installing a jail may have it's advantages in respect to security flaws or bugs in general, installing through sysinstall may be faster and probably less error prone.

It is in fact very easy to run sysinstall in non-interactive mode on the host itself (not inside the jail!) from a shell script, which may optionally run some post-installation tasks afterwards.
By the fact that sysinstall can use the same command line arguments as if given through a configuration file, a single line could be used in your script to achieve this:

# sysinstall nonInteractive=yes
_ftpPath=ftp://ftp2.ch.freebsd.org/pub/FreeBSD
mediaSetFTP distSetMinimum installRoot=/var/jails/192.168.0.1
releaseName=6.1-RELEASE installCommit

This line would cause sysinstall to run in non-interactive mode, useing ftp://ftp2.ch.freebsd.org/pub/FreeBSD as it's download source. DistSetMinimum selects the smallest userland possible while installRoot is given to define destination directory.

releaseName ist required to choose the actual release and must be set to your main release (e.g. 6.0-RELEASE, 6.1-RELEASE, etc). If you don't set it, sysinstall will use the release name of your currently installed userland (e.g. 6.1-RELEASE-p1) and will most definitly fail because there exists no such distribution set for download.
It is also possible to choose a different release like 5.5-RELEASE to be installed inside a jail. You must consider though that most tools will run expect those that interact with the kernel directly (ps, top, etc). In generall I would not recommend mixing releases expect you have a very good reason to do so.

Don't forget to add the installCommit command at the end otherwise sysinstall won't do anything at all.

By examing the sysinstall man page you will find other options to select different (or build customer) dist sets.