Preseeding Ubiquity

Chris Jenkins - Genesi USA, Inc.

Terminology

- `d-i`: "Debian Installer". Official installation system for Debian since Debian 3.1
  - Heavily used on other Debian derivatives (like Ubuntu)
- `Ubiquity`: Simple, graphical installer system for Ubuntu and Debian using Debian Installer as a backend
- `Pre-seeding`: method for automating the system configuration stage (locale, keyboard, etc) of Debian Installer
- `oem-config`: Configuration program for Original Equipment Manufacturer, allows OEM to pre-configure software on system without configuring everything, such as username, hostname, and password.
- `debconf`: "Install Shield Wizards Done Right", Debian package configuration system

Prerequisites

- You will need access to the Bamboo Builders repository to make your own pre-configured builds (contact Genesi for more information).
    - It is suggested (though not required) that you also read the "Bamboo Builders" support material.
- You also need some familiarity with the conventions of Debian Installer configuration files.
    - For Ubuntu 10.10, documentation can be found here:
      https://help.ubuntu.com/10.04/installation-guide/i386/appendix-preseed.html.
    - An an extended example of a preseed file can be found here:
      https://help.ubuntu.com/10.04/installation-guide/example-preseed.txt
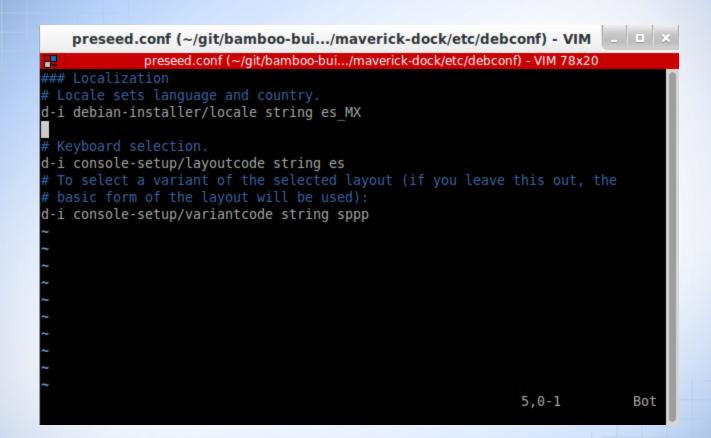
Pre-seeding in a Bamboo Build (1)

The following code is responsible for pre-seeding

```
echo "--- Preparing oem-config"
# trigger oem-config to start at boot
oem-config-prepare

# fix a few things with log permissions
# ...

# set defaults
debconf-set-selections "/installer/static/etc/debconf/preseed.conf"
```

- This code lives in the "cleanup" stage of the maverick-dock plan

- After configuring a few things (such as a default OEM account), we run `oem-config-prepare` to make sure that Ubiquity runs on the next system boot

- `debconf-set-selections` allows us to set in advance the answers to some configuration questions (with a caveat discussed at the end of the presentation)
  - This is currently the only supported method, e.g. pre-seeding through kernel boot args does not yet work

```
### Localization
# Locale sets language and country.
d-i debian-installer/locale string es_MX

# Keyboard selection.
d-i console-setup/layoutcode string es
# To select a variant of the selected layout (if you leave this out, the
# basic form of the layout will be used):
d-i console-setup/variantcode string sppp
~
~
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```

Pre-seeding in a Bamboo Build (2)

- The file `preseed.conf` lives in `bamboo-builders/installer/static/maverick-dock/etc/debconf/` .
  From the official documentation for Debian Installer on Ubuntu:
  The preconfiguration file is in the format used by the **debconf-set-selections** command. The general format of a line in a preconfiguration file is:
  `<owner> <question name> <question type> <value>`
- In the above example, the line that selects the custom SPPP keyboard as the default layout says:
  "The owner is Debian Installer (`d-i`), the question is `console-setup/variantcode` (this also serves as a location of the question, of sorts), the question expects a string and the value is `sppp` (which is the variant code the author has given the custom keyboard layout)."
- Note that there is some tension between preseeding options so the user **does not see** them and running `oem-config-prepare`. Even setting the question's `seen` flag to `true` will not suffice.

Debugging

- During system configuration, Ubiquity will log its actions in `/var/log/syslog`, and after configuration this file will be moved to `/var/log/installer/syslog`.
- If you run Ubiquity with the flag `--debug` it will additionally log more verbose output (**including user passwords!**) to `/var/log/installer/debug`.