

# Growing participation, growing participants

I've just created an SSH key with ssh-keygen. I can't use it to log in to my hub system, though--how do I set up a remote login?

Edit question

Tell the remote host about your key by adding the key to the authorized\_keys2 file on the remote host. The typical command for doing that is:

```
ssh your_remote_host 'cat >> ~/.ssh/authorized_keys2'
< ~/.ssh/id_rsa.pub
```

or

```
ssh your_remote_host 'cat >> ~/.ssh/authorized_keys2'
< ~/.ssh/id_dsa.pub
```

depending on whether you created an RSA or DSA key with ssh-keygen.

Edit answer

Discussion View history

Recommend a document to read before this one.

URL (if document is online):  Name:

What background should reader have?

Or add a new reader background (audience for the document):

Select a topic

Or add a new topic:

*Supporting the users of software projects through better communications*

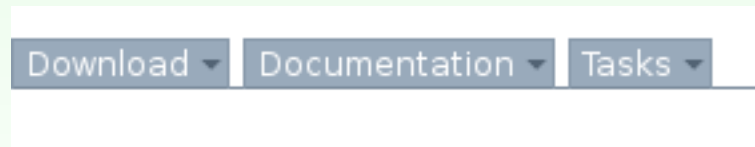
# Barriers to recruiting project members

New software projects hit the Internet every day

Bringing new users up to speed is critical for success

But most projects unknowingly erect barriers that limit membership to a small group of experts

Information is hard to get from mailing lists, newsgroups, and documentation, because they are written by experts for other people like themselves



# Project members can educate each other...

But the process can go faster with the right tools and formats

Projects can increase participation by:

1. Making contributions more visible and easier to find
2. Providing pathways through related documents
3. Investing in improving the most important contributions
4. Measuring quality

# Steps toward a better experience for visitors and users

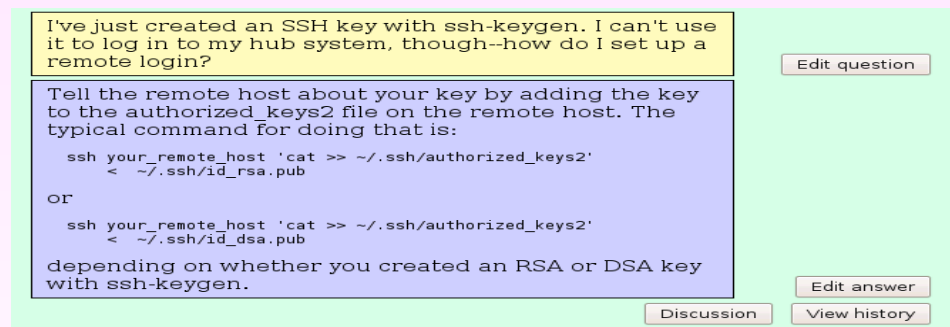
1. Move technical questions from newsgroups to FAQs
2. Solicit references to other documents
3. Invest extra effort in popular postings
4. Check how well you're doing

# Step 1: Move technical questions to FAQs

Email and postings lack context; they are hard to find and hard to read

They are useful for historically valuable postings such as announcements and design discussions

But technical questions should be on a FAQ



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depending on whether you created an RSA or DSA key with ssh-keygen.

Edit question

Edit answer

Discussion View history

*Professional support can be valuable for organizing the FAQ*

# Step 2: Solicit references to other documents

The Internet lends itself naturally to short, loosely connected utterances

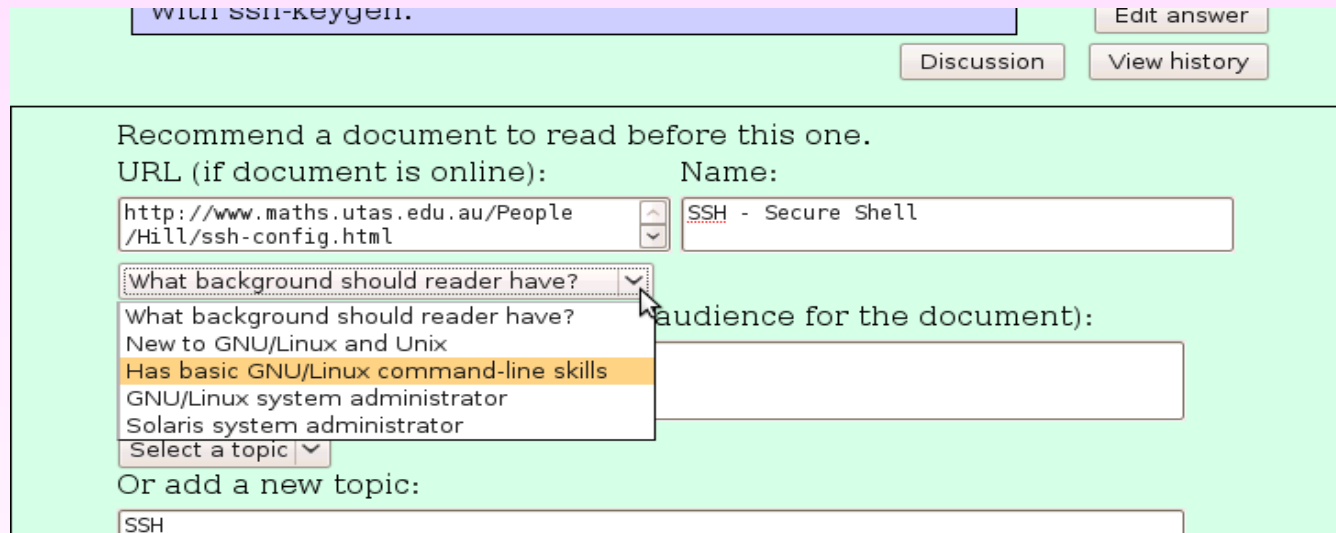
Some readers need background information to understand a posting

Others want pointers to more advanced information after reading the posting

Many users benefit from pointers to related material in other languages

# Step 2: Solicit references to other documents (continued)

Each FAQ question can offer a form where readers can suggest background and follow-up documents



The screenshot shows a web form for recommending documents. At the top, there is a text input field containing "with ssh-keygen." and two buttons: "Edit answer" and "Discussion". Below this, there are two more buttons: "Discussion" and "View history". The main form area is titled "Recommend a document to read before this one." and contains the following fields:

- "URL (if document is online):" with a text input field containing "http://www.maths.utas.edu.au/People/Hill/ssh-config.html".
- "Name:" with a text input field containing "SSH - Secure Shell".
- "What background should reader have?" with a dropdown menu. The dropdown is open, showing a list of options: "What background should reader have?", "New to GNU/Linux and Unix", "Has basic GNU/Linux command-line skills" (highlighted), "GNU/Linux system administrator", and "Solaris system administrator". Below the dropdown is a "Select a topic" button.
- "audience for the document):" with a text input field.
- "Or add a new topic:" with a text input field containing "SSH".

Automated tools can generate paths for readers of different types; thus creating large virtual books out of small pieces written by different authors

# Step 3: Invest extra effort in popular postings

Determine popularity by culling statistics from logs about visits and search terms

Find out through the editing histories who contributed the most to a FAQ entry

Ask successful contributors to write longer, more self-contained documents

Solicit translations of popular documents

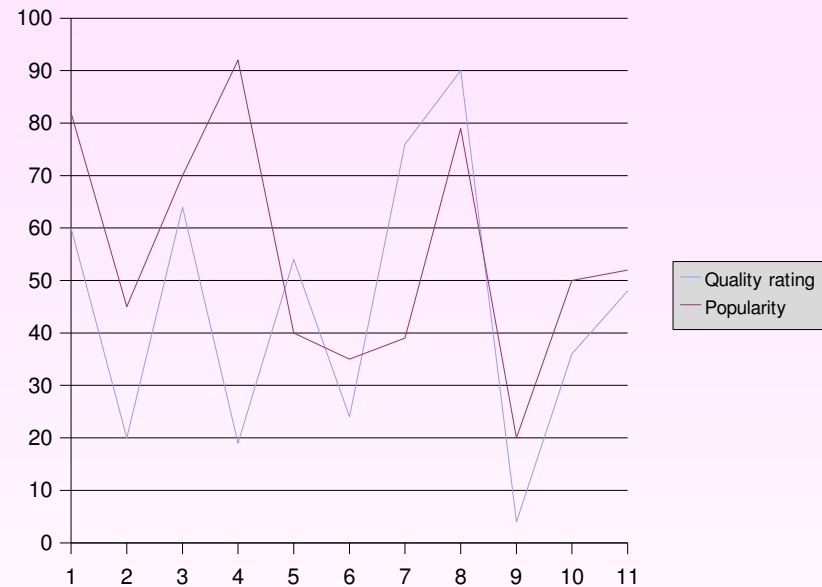


# Step 3: Invest extra effort in

## popular postings (continued)

In the ratings shown below, document 4 deserves some extra work because it is viewed often but is rated as low quality

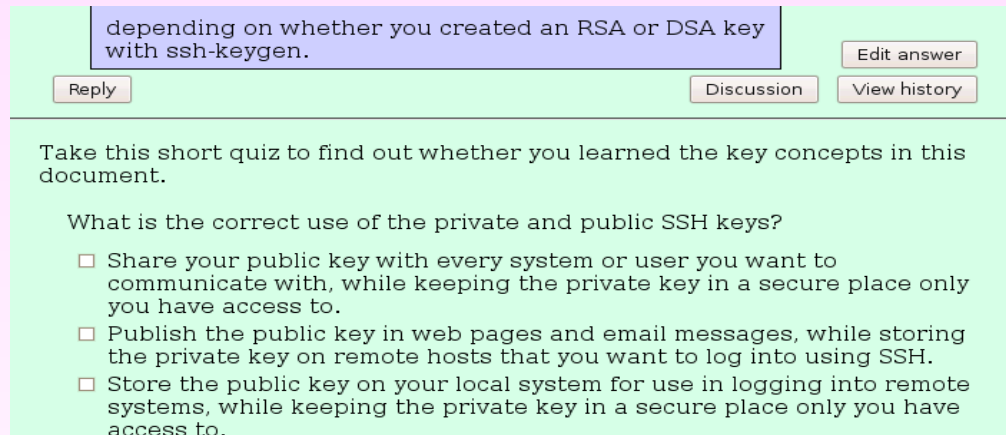
In contrast, document 9 is low-quality but is not viewed often, so an investment might not be worthwhile.



*Professional editing and translation can add value*

# Step 4: Check how well you're doing

Ratings can be useful, but to really know whether a document is successful, try quizzing the reader



depending on whether you created an RSA or DSA key with ssh-keygen.

Reply Discussion View history Edit answer

Take this short quiz to find out whether you learned the key concepts in this document.

What is the correct use of the private and public SSH keys?

- Share your public key with every system or user you want to communicate with, while keeping the private key in a secure place only you have access to.
- Publish the public key in web pages and email messages, while storing the private key on remote hosts that you want to log into using SSH.
- Store the public key on your local system for use in logging into remote systems, while keeping the private key in a secure place only you have access to.

*Professional support can be valuable for choosing, writing, and testing quiz questions*

# A comparison

A brief example follows to illustrate the value of Step 1:  
using a FAQ

We'll look at a typical attempt to educate a new user

First we'll walk through a typical sequence of five postings  
to a newsgroup, and then go through the same sequence in a  
FAQ

## jacknewb@example.org posts a question to a traditional newsgroup

I've just created an SSH key with ssh-keygen. I can't use it to log in to my hub system, though--how do I set up a remote login?

Reply

View thread

quickrespondent@example.edu posts a brief answer

I've just created an SSH key with ssh-keygen. I can't use it to log in to my hub system, though--how do I set up a remote login?

*Posted by: jacknewb@example.org*

*Add an answer below.*

For the remote host to recognize your key, you have to put it in the authorized\_keys2 file.

View thr

## slowrespondent@example.edu adds more detail

system, though--how do I set up a remote login?

*Posted by: jacknewb@example.org*

For the remote host to recognize your key, you have to put it in the `authorized_keys2` file.

*Posted by: quickrespondent@example.edu*

*Add an answer below.*

To be more specific, the `authorized_keys2` file is in a directory named `.ssh` (notice the initial dot) under your home directory. Your key is in `~/.ssh/id_rsa.pub` or `~/.ssh/id_dsa.pub`, depending on whether you created an `RSA` or `DSA` key with `ssh-keygen`.

View

jacknewb@example.org can't get the advice to work, and therefore posts a follow-up question

To be more specific, the `authorized_keys2` file is in a directory named `.ssh` (notice the initial dot) under your home directory. Your key is in `~/.ssh/id_rsa.pub` or `~/.ssh/id_dsa.pub`, depending on whether you created an RSA or DSA key with `ssh-keygen`.

*Posted by: slowrespondent@example.edu*

*Add an answer below.*

I tried:

```
ssh-keygen -t rsa etc.  
cat ~/.ssh/id_rsa.pub >> ~/.ssh/authorized_keys2  
ssh my-remote-hub
```

but I still can't log in to the remote hub.

View t

## slowrespondent@example.edu posts a fuller answer

PERIOD.

```
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cat ~/.ssh/id_rsa.pub >> ~/.ssh/authorized_keys2  
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# Problems of using a mailing list or newsgroup

Anyone trying to find this information later has to read and synthesize five messages

Furthermore, the answers are buried in an archive and might not even turn up in a search

# Solution

Provide a FAQ that is editable by everyone

Community self-help will be just as easy, and much more powerful because answers are easier to find and understand

The following example uses a FAQ to record the same exchange carried out before

jacknewb@example.org posts a question

I've just created an SSH key with ssh-keygen. I can't use it to log in to my hub system, though--how do I set up a remote login?

Reply

Discussion

Edit question

View history

quickrespondent@example.edu posts a brief answer

I've just created an SSH key with ssh-keygen. I can't use it to log in to my hub system, though--how do I set up a remote login?

Tell the remote host about the key by adding the key to the authorized\_keys2 file.

Edit question

Edit answer

Discussion

View history

slowrespondent@example.edu edits the answer to add more detail

I've just created an SSH key with ssh-keygen. I can't use it to log in to my hub system, though--how do I set up a remote login?

Edit question

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Edit answer

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Edit question

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There's still a problem.

I tried

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ssh-keygen -t rsa etc.  
cat ~/.ssh/id_rsa.pub >> ~/.ssh/authorized_keys2  
ssh my-remote-hub
```

but I still can't log in to the remote hub.

Edit answer

## slowrespondent@example.edu rewrites the answer

I've just created an SSH key with ssh-keygen. I can't use it to log in to my hub system, though--how do I set up a remote login?

Edit question

Tell the remote host about your key by adding the key to the `authorized_keys2` file on the remote host. The typical command for doing that is:

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# Summary

Preserve valuable user exchanges through a FAQ

Expand offerings through references

Improve material on the most valuable topics

Check the quality of the material



# Status

The tools shown in this presentation are mock-ups

I am seeking help to create general interfaces that allow access to the features in this presentation from multiple tools (browsers, IDEs, editors, etc.)

## For further information

### Articles:

[http://praxagora.com/community\\_documentation/](http://praxagora.com/community_documentation/)

### Contact:

[andyo@oreilly.com](mailto:andyo@oreilly.com)

— End —