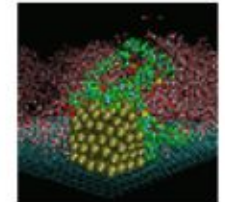
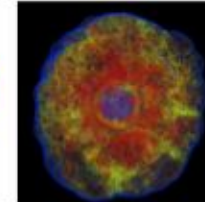
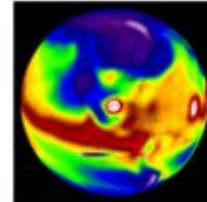
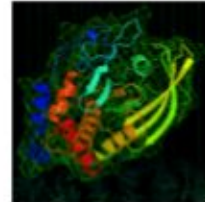
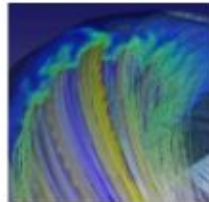
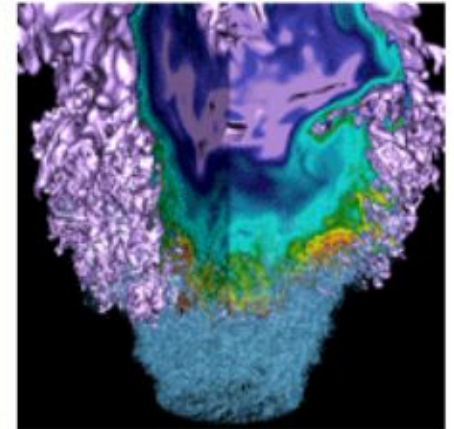


# Storing SSH public keys in NIM

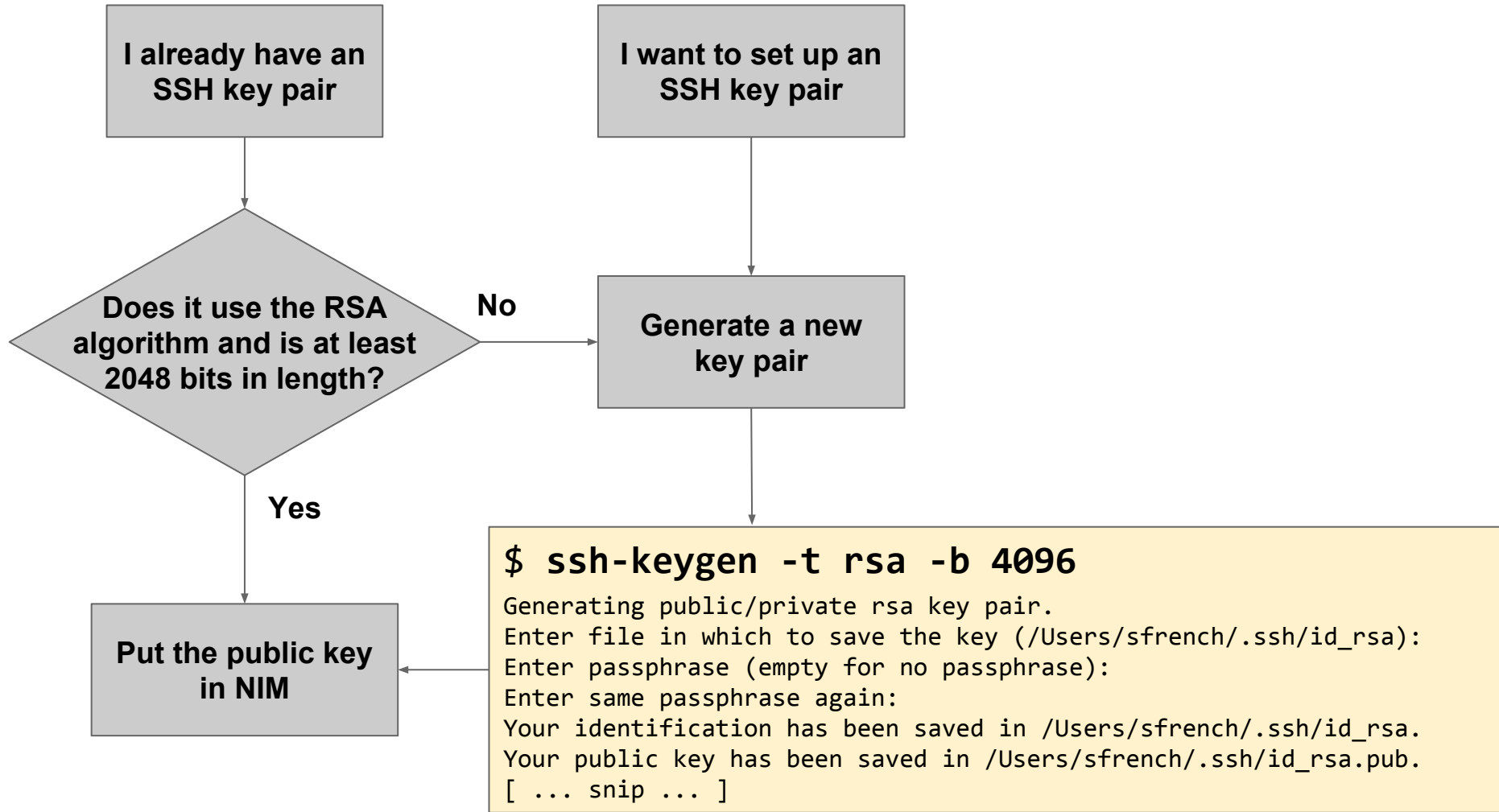


# SSH keys in NIM: Background

---

- **What's happening?**
  - Starting January 12, 2016, authentication via public keys in `~/.ssh/authorized_keys` is **disabled**
- **Who is affected by this change?**
  - **Affected:** If you use public key authentication to access NERSC systems via SSH
  - **Not affected:** If you authenticate using your NIM password (or connect via another mechanism)
- **Why is NERSC doing this?**
  - Security improvements that require authentication from a single source (LDAP)

# So, what should I do?



# Adding SSH public keys to NIM (1)

Login to NIM and navigate to My Stuff → My SSH Keys:

Scott French | [Logout](#) | [Change My Password](#)



The screenshot shows the NIM user interface. At the top left is the NERSC logo, followed by a 'NIM' button. To the right are navigation tabs: 'NIM Home', 'My Stuff', and 'Search'. The 'My Stuff' tab is active, and its dropdown menu is open, showing options: 'My Account Usage', 'My Contact Info', 'My SSH Keys' (highlighted with a red arrow), and 'My ERCAP Requests'. Below the navigation is a welcome message: 'Welcome to the NERSC Information Management (NIM) system. Use this interface to find information about NERSC users and repositories. Authorized managers can also modify information and create or review...'

You should see something like this:

The screenshot shows a horizontal navigation bar with several tabs: 'Account Usage', 'Logins by Host', 'Unix Groups', 'Roles', 'Contact Info', 'Grid Certificates', and 'SSH Keys'. The 'SSH Keys' tab is highlighted in blue.

Scott French



sfrench

A large, empty rectangular form area with a thin border and a small double-slash icon in the bottom right corner, intended for adding SSH keys.

Add

# Adding SSH public keys to NIM (2)

Copy and paste your **public key** into the text box; Click Add:

Account Usage	Logins by Host	Unix Groups	Roles	Contact Info	Grid Certificates	SSH Keys
Scott French						
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">sfrench ▾</div> <div style="border: 1px solid #ccc; padding: 5px; flex-grow: 1;"> <pre>ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQCAQC9rSsk3/kSOez8YuYTIImxeAgPr++4CMxfS3/fRoIQiubW 8QdcxgU3et/bRWDEYM88rYwGWCQpZhlmqB2vZiPL/NhWkkK9d9AwFfifxtSfMTJT14sJyd0u6SkM mNK7f4THRO3dc6ch9x88GLIOIIAI7xjvAhsQ5qKTgjb7OrGpmC7Kls2xnKkOA+mmzRERD2IAFUFE ZRipJd3eyNs+q/uDUttoPDQAlgeJM6aGmpHRaU8pbeR2OeEFs6UIJ5BzAUH02BiNa2i8ovLzCoUT 26KVkmC87D15cNj7WjN8F1s3lGrBHCzjOdkVtpHroKg5JTb0jU3MRu9MUJQpeotRQG6f/9L4+XZzu e1tepY7BZbvejH3QpLeF8lcu0PmrcTIm3Ax1LZXaHNpUuz6E7hZCf9zYvnKztVN4d7znCHQhdq0O eQyL4XiCud1V5vd/we6Qi3QmnNB7LNjzThPnKDsE9tgek5qkGOp6jA3i28BrtwYm9fGxuADbSwW1j</pre> </div> <div style="margin-left: 10px; text-align: center;"> <div style="margin-bottom: 10px;"></div> <div></div> </div> </div>						

**Easy ways to copy the public key in its entirety**

Mac

```
$ pbcopy < ~/.ssh/id_rsa.pub
```


Linux

```
$ xclip < ~/.ssh/id_rsa.pub
```

# Adding SSH public keys to NIM (3)

When you're done, you'll see something like this:

## SSH Public Keys

	▼ Uname	▼ SSH Public Key	▼ Enabled
<input type="checkbox"/>	sfrench	<pre>ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQCAQC9rSsk3/kSOez8YuYTIImxeAgPr++4CMxfS3/fRoIoiubW 8QdcxgU3et/bRWDEYM88rYwGWCQpZhlmqB2vZIPL/NhWkkK9d9AwFfIxtSfMTJT14sJyd0u6SkM mNK7f4THRO3dc6ch9x88GLIOIIAI7xjvAhsQ5qKTgjb7OrGpmC7KIs2xnKkOA+mmzRERD2IAFUFE ZRipJd3eyNs+q/uDUttoPDQAlgeJM6aGmpHRaU8pbeR2OeEFs6UIJ5BzAUH02BiNa2i8ovLzCoUT 26KVkmC87D15cNj7WjN8F1s3lGrBHCzjOdkVtpHroKg5JTb0jU3MRu9MUJQpeotRQG6f/9L4+XZzu e1tepY7BZbvejH3QpLeF8lcu0PmrcrTim3Ax1LZXaHNpUuz6E7hZCf9zYvnKztVN4d7znCHQhdq0O eQyL4XiCud1V5vd/we6Qi3QmnNB7LNjzThPnKDsE9tgek5qkGOp6jA3i28BrtwYMn9fGxuADbSwW}</pre>	Y
<input type="text" value="sfrench"/>		<div style="border: 1px solid gray; height: 150px; width: 100%;"></div>	<input type="button" value="Add"/>

**Tip:** To delete an existing public key, mark the checkbox and click the red **X**

**Tip:** You can add multiple public keys to NIM

## But, will it work for me?

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- **You can test this on Cori! After saving in NIM:**
  - Rename your `~/.ssh/authorized_keys` file to something else (e.g. `authorized_keys.old`)
  - Try logging into Cori
- **What if I ssh between nodes of the same system?**
  - This should “just work” (server-side configuration)
- **What if I ssh between NERSC systems?**
  - Option 1: ssh agent forwarding (`ForwardAgent`)
  - Option 2: Generate a new key pair at NERSC, and add that public key to NIM as well

## What if I need help?

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- **As always, the consultants are here to help!**
- **If you have a use case or workflow for which this change could pose problems, we'd like to know**
  - There is still time to come up with solutions or workarounds for unusual cases
- **Bottom line:** If you use public key authentication when ssh-ing to NERSC, please give this a try soon on Cori
- **See also:** <https://www.nersc.gov/users/connecting-to-nersc/connecting-with-ssh/>





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**Thank you!**