**Complete System Setup and configuration** (Choose option A or B below)

**Factory configured FC SAN or NFS optimized systems**

1. **Complete configuration worksheet**
   - From http://mysupport.netapp.com/NOW/public/system_setup/

2. **Cable Windows client to same network as your controllers**
   - Set client networking configuration:
     - TCP/IP address: 10.10.10.20
     - Netmask: 255.255.255.0
     - Gateway: 10.10.10.1

3. **Power on all disk shelves**
   - Refer to documentation shipped with disk shelves for details
   - May take up to 10 minutes

4. **Log into System Manager**
   - Enter IP: 10.10.10.10
   - User name: admin
   - Password: netapp123

5. ** Provision storage for your AFF system**
   - Complete the AFF SAN and/or NFS Optimized Installation Worksheet for your system type from your shipment box or from:
     - https://library.netapp.com/ecm/ecm_download_file/ECMP12462582
   - Complete the storage provisioning wizards for your system.
   - The wizards either automatically start when you log into the system or you can access them in the Storage Applications tab under Storage Virtual Machines.

6. **For advanced setup and preparing the system for production, go to the FC SAN Optimized AFF Setup Guide**
   - https://library.netapp.com/ecm/ecm_download_file/ECMP12466574

**All other AFF systems**

1. **Complete configuration worksheet**
   - From http://mysupport.netapp.com/NOW/public/system_setup/

2. **Cable Windows client to same network as your controllers**

3. **Connect disk shelf power cables and power on all disk shelves only**

4. **Install and run System Setup software**
   - If you cannot see System Setup, see the Data ONTAP Software Setup Guide.
   - Install System Setup software
   - Connect the power cables to the controllers. Do not power on your system until directed by System Setup software
   - Both power supplies MUST be powered on.
   - Wait for discover to complete.
   - Enter the values from the configuration worksheet into System Setup.

5. **Register at mysupport.netapp.com**

6. **Download and run Config Advisor**

7. **Run OnCommand System Manager**
   - Enter node's IP address.
   - Provision storage.
   - Configure other protocols, data protection, and AutoSupport.
   - Set up Service Processor and Remote Support Agent.
   - Using All Flash FAS with Clustered Data ONTAP: https://library.netapp.com/ecm/ecm_download_file/ECMP12466574

**HELPFUL LINKS**
Visit the NetApp web site for more information:
- FC SAN Optimized AFF Setup Guide: https://library.netapp.com/ecm/ecm_download_file/ECMP12466574
- Data ONTAP Library: https://library.netapp.com/ecm/ecm_download_file/ECMP12462582
- NFS Optimized NFS volumes: System Manager Online Help
- Hardware Volume: https://library.netapp.com/ecm/ecm_download_file/ECMP12466574

**Prepare for Installation**

- **Controller-to-controller cables**
- **Host cables**
- **Storage cables**
- **Control Processor-Retain cables**
- **Ethernet cables**
- **SAS cables**
- **Serial cable**
- **Screwdriver**
- **Back panel 6U per chassis**
- **Screwdriver**
- **Additional network cables (Provided with system)**
- **Microsoft Windows® client**
- **Optical network cable**: Runs the software to configure your storage system

**Installation and Setup Instructions**

**AFF80xx Systems with I/O Expansion Modules**

1. **Prepare for Installation**
   - In the box:
     - Controller-to-controller cables
     - Host cables
     - Storage cables
     - Control Processor-Retain cables
     - Ethernet cables
     - SAS cables
     - Serial cable
     - Screwdriver
     - Back panel 6U per chassis
     - Additional network cables (Provided with system)
     - Microsoft Windows® client
   - You provide:
     - Back panel 6U per chassis
     - Screwdriver
     - Additional network cables (Not provided with system)
   - From http://mysupport.netapp.com/NOW/download/tools/config_advisor/
   - Download:
     - To access documentation:
       - OnCommand System Manager documentation:
       - Hardware Volume:
         - https://library.netapp.com/ecm/ecm_download_file/ECMP12466574
     - For connecting your storage to your network switch and Microsoft® Windows® client:
       - https://library.netapp.com/ecm/ecm_download_file/ECMP12466574
Install hardware

1. Unpack and install system
   - Unpack all boxes and inventory contents.
   - Install rail kits, as needed, using the enclosed installation instructions.
   - Install system components on rails or in a system cabinet per installation instructions.
   - Attach cable management tray.
   - Place the bezel on the front of the system.

2. Cable controller to switches
   See your network administrator for help connecting to your switches.
   1. Connect HA ports ib0a to ib0a and ib0b to ib0b.
   2. Connect the cluster interconnect cables.
      Optional - ib0b to ib0b, and ib0d to ib0d ports on both controllers.
   3. Connect the cluster interconnect cables.
      Optional - ib0b to ib0b, and ib0d to ib0d ports on both controllers.
   4. Connect the cluster interconnect cables.
      Optional - ib0b to ib0b, and ib0d to ib0d ports on both controllers.
   5. Insert SAS cables UP or DOWN and gently push into place until it clicks.

3. Cable storage (Choose option A or B below)

A. Two stacks with one disk shelf each
   1. Cable on-board SAS ports.
   2. Cable SAS card ports.
   3. Optional - Ethernet cables (ACP)
      Cable the ACP port on each controller to the disk shelves.
   4. Insert SAS cables UP or DOWN and gently push into place until it clicks.

B. Two stacks with two disk shelves each
   1. Cable the SAS shelf-to-shelf ports.
   2. Cable on-board SAS ports.
   3. Cable SAS card ports.
   4. Optional - Ethernet cables (ACP)
      Cable the ACP port on each controller to the disk shelves and shelf-to-shelf ACP ports.

CAUTION
LIFTING HAZARD
115 lbs. (52.2 kg)

For additional configurations, see HELPFUL LINKS.
Install hardware

1 Unpack and install system
   - Unpack all boxes and inventory contents.
   - Install rail kits, as needed, using the enclosed installation instructions.
   - Install system components on rails or in a system cabinet per installation instructions.
   - Attach cable management tray.
   - Install rail kits, as needed, using the enclosed installation instructions.
   - Unpack all boxes and inventory contents.

See your network administrator for help connecting to your switches.

Cable controller to switches

2 Cable controller to switches
See your network administrator for help connecting to your switches.

Two node switchless cluster, clustered Data ONTAP

1 Connect HA ports ib0a to ib0a and ib0b to ib0b.

2 Connect the cluster interconnect cables.
   Optional - e0b to e0b, and e0d to e0d ports on both controllers.

3 Connect Ethernet ports to the management switches (for cluster and node mgmt. LIFs).
   Connect e0i ports to the management switches (for SW mgmt. LIFs).

4 Connect Ethernet cables (ACP)
   Connect the SAS shelf-to-shelf ports.
   Connect SAS shelf-to-shelf ACP ports.

5 Strap the cables to the cable management tray. (Not shown)

DO NOT install power cables at this point.

3 Cable storage

(Choose option A or B below)

A Two stacks with one disk shelf each

1 HA cables
   PN 112-00297 or 112-00299

2 Cluster interconnect cables
   PN 112-00297 or 112-00299

3 Ethernet cables (ACP)
   Connect e0i ports to the management switches.
   Connect e0j ports to data switches.
   Connect ports e0k|0k and e0l|0l to data switches.
   Optional - e0f|0f and e0h|0h to data switches.

4 Strip the cables to the cable management tray. (Not shown)

6 Insert SAS cables UP or DOWN and gently push into place until it clicks

B Two stacks with two disk shelves each

1 SAS cables
   PN 112-00307 or 112-00309

2 Cable onboard SAS ports.

3 Cable SAS card ports.

4 Ethernet cables (ACP)
   Cable ACP port on each controller to the disk shelves.

5 Insert SAS cable UP or DOWN and gently push into place until it clicks

For additional configurations, see HELPFUL LINKS.
Prepare for installation

1. Set client networking configuration:
   - TCP/IP address: 10.10.10.10
   - Netmask: 255.255.255.0
   - Gateway: 10.10.10.1

2. Connect disk shelf power cables and power on all disk shelves only

3. Connect the power cables to the controllers. Do not power on your system until directed by System Setup software.

4. Provision storage for your AFF system
   - Complete the AFF SAN and/or NFS Optimized Installation Worksheet for your system type from your shipment box or from:
     - https://library.netapp.com/ecm/ecm_download_file/ECMM1280392
     - https://library.netapp.com/ecm/ecm_download_file/ECMP12466574

5. Log into System Manager
   - Enter IP: 10.10.10.10
   - User name: admin
   - Password: netapp123

6. Download and run System Setup software
   - From http://mysupport.netapp.com/NOW/public/ECMP12462582

7. Run OnCommand System Manager
   - Enter node’s IP address.
   - Provision storage.
   - Configure other protocols, data protection, and AutoSupport.
   - Set up Service Processor and Remote Support Agent.
   - Using All Flash FAS with Clustered Data ONTAP:
     - https://library.netapp.com/ecm/ecm_download_file/ECMP12466674

For advanced setup and preparing the system for production, go to the FC SAN Optimized AFF Setup Guide:
https://library.netapp.com/ecm/ecm_download_file/ECMP12465825

HELPFUL LINKS

Visit the NetApp web site for more information.

- OnCommand System Manager documentation set:
  - https://library.netapp.com/ecm/ecm_download_file/ECMP12466674

- Data ONTAP Library:
  - https://library.netapp.com/ecm/ecm_download_file/ECMP12467067

- Controller and configuration matrix for Universal SAS and AFF Cabling Guide:
  - https://library.netapp.com/ecm/ecm_download_file/ECMP12465825

- NFS Optimized NFS volumes in the System Manager Online Help
- For connecting your storage to your network:
  - 10GbE network cable
  - Ethernet cables
  - Optical network cable
  - SAS cables
  - Power cables
  - Serial cable
  - SCSI cables
  - Host cables
  - Controller-to-controller cables

You provide:
- Back space 6U per chassis
- Screwdriver
- Additional network cables (not provided with system)
- For connecting your storage to your network switch and Microsoft® Windows® client

Microsoft Windows® client
- Runs the software to configure your storage system

Download:

- FC SAN Optimized AFF Setup Guide
- https://library.netapp.com/ecm/ecm_download_file/ECMP12466674

- Using All Flash FAS with Clustered Data ONTAP
- https://library.netapp.com/ecm/ecm_download_file/ECMP12467067

- NFS optimized NFS volumes in the System Manager Online Help