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Active > 360 installation configuration parameter reference

This chapter describes the Active>360 installation configuration parameters that you can use with the Active>360 Configurator script (**configurator.ksh**) and installation script (**active_install.ksh**). Use this parameter reference to help you prepare an Active>360 installation configuration file, as described in [“Task 6: Run the Active>360 Configurator script”](#).

This chapter contains the following sections:

- [Overview of Active>360 installation configuration parameters](#)
- [Active>360 installation configuration parameters in alphabetical order](#)

Overview of Active > 360 installation configuration parameters

This section provides an overview of Active>360 installation configuration parameters. It covers the following topics:

- [How this reference is organized](#)
- [Default parameter values](#)
- [Using parameters as variables in other parameters](#)

How this reference is organized

The parameters in this reference are organized alphabetically using the same dotted-path notation that is used to refer to parameters in the Active>360 [Configurator script](#).

For example, the following Configurator prompt asks for the username under which the Active>360 installation will be performed:

```
=> The user specified will be the owner of the product and must be the install user.  
=> ab.aiuser_name: [actadmin]
```

In this example, the Configurator prompt refers to the parameter named [ab.aiuser_name](#). The dotted-path notation reflects the location of the parameter in the YAML-compliant configuration file (**active.yml**) that is generated by the Configurator script and in the sample **example.yml** file that is included with Active>360.

The following table shows several examples of parameters expressed with dotted-path notation and with YAML-compliant syntax:

Dotted-path	YAML-compliant
ab.aiuser_name	ab: aiuser_name:
act.bridge.protocol	act: bridge: protocol:
act.mhub.app.apptype	act: mhub: app: apptype:

Default parameter values

Many Active>360 installation configuration parameters have default values. If a parameter has a default value, the Active>360 Configurator displays that value in the parameter prompt. You can accept the default or override it with a value of your choosing.

If you accept the default value for a given parameter, the Active>360 Configurator will *not* write the *parameter:value* pair in the generated **active.yml** file; the default value is implied and will be used by the Active>360 installation script.

Using parameters as variables in other parameters

You can use YAML variable syntax to enable one parameter to inherit the value of another parameter. For example, you could make the value of *child_parameter* dependent on the value of *parent_parameter*; if the value of *parent_parameter* changes, the value of *child_parameter* changes accordingly.

You do this by setting the value of *child_parameter* to a the dotted-path name of *parent_parameter*, surrounded by curly brackets and preceded by a dollar sign (**{}**), as follows:

```
parent_parameter: some_value
child_parameter: ${path.to.parent_parameter}
```

where:

- *parent_parameter* is the name of the parameter with the value that you want to use for another parameter.
- *some_value* is the value defined for *parent_parameter*.
- *child_parameter* is the parameter for which you want to use the value of *parent_parameter*.
- *path.to.parent_parameter* is the dotted-path name *parent_parameter*.

For example, to use the same set of hostnames for Active>360 message bus **conductors** and **brokers**, you could specify a list of hostnames for the **conductors** parameter, then use a YAML variable as the value for the **brokers** parameter, as follows:

```
act:
  hosts:
    messagebus:
      conductors:
        - host1
        - host2
      brokers: ${act.hosts.messagebus.conductors}
```

NOTE: Parameter variables are the only place in Active>360 configuration files where dotted-path parameter notation is valid YAML syntax!

Active>360 installation configuration parameters in alphabetical order

This section describes the Active>360 installation configuration parameters in detail.

ab.aiuser_group

(Required) The primary Linux user group for the user under whose credentials the Active>360 installation is performed.

Default value	<i>none</i>
Details	<ul style="list-style-type: none">• This user group must have sufficient privileges on all target installation hosts to create and write to the directories that are specified by the act.root and ab.tmp_dir parameters.• We recommend using a group that is associated with functional user accounts or system accounts, rather than with general operating system user accounts.
Generated YAML example	<pre>ab: aiuser_group: actadmin</pre>

ab.aiuser_name

(Required) The primary Linux username for the user account under whose credentials the Active>360 installation is performed.

Default value	<i>none</i>
Details	<ul style="list-style-type: none">• All Active>360 installer processes run under this username.• The user account must have sufficient account or group privileges on all target installation hosts to create and write to the directories that are specified by the act.root and ab.tmp_dir parameters.• We recommend using a functional user account or system account, rather than a general operating system user account.
Generated YAML example	<pre>ab: aiuser_name: actadmin</pre>

ab.ca_certificate_bundle_path

The path to a certificate authority bundle for secure communications between Active>360 HTTPS clients.

Default value	<code>/etc/ssl/certs/ca-bundle.crt</code>
Details	<ul style="list-style-type: none">This parameter is required when any Active>360 subsystem uses HTTPS communications; for example, when the value of the act.runtime.https_enabled parameter is True.The path must be valid on the Active>360 administration host and all target installation hosts.
Generated YAML example	<pre>ab: ca_certificate_bundle_path: /etc/ssl/certs/ca-bundle.crt</pre>

ab.can_become_root

A Boolean value that specifies whether the installation owner ([ab.aiuser_name](#)) has passwordless **sudo** privileges.

Default value	False
Valid values	This value must be one of the following: <ul style="list-style-type: none">True — The aiuser_name user account has passwordless sudo privileges.False (default) — The aiuser_name user account does not have passwordless sudo privileges.
Details	<ul style="list-style-type: none">Set this parameter to True when either of the following parameters is set to True:<ul style="list-style-type: none">act.runtime.use_tmpfsab.use_systemdThe user account specified by the aiuser_name parameter must have passwordless sudo privileges on the Active>360 administration host and all target installation hosts.For more information, see "Preparing passwordless sudo".
Generated YAML example	<pre>ab: can_become_root: false</pre>

ab.key.client.host.urls

The URLs of the key servers providing host keys for the Co>Operating System hosts created by the Active>360 installer.

Default value	<i>none</i>
Details	<ul style="list-style-type: none">• This parameter is required when the value of the ab.key.host.source parameter is Server.• This parameter corresponds to the Co>Operating System AB_HOSTNAME_KEYSERVER_URLS parameter.
Generated YAML example	<pre>ab: key: client: host: urls: - abks://keys1.bigcorp.com:6153 - abks://keys2.bigcorp.com:6153</pre>

ab.key.client.users.urls

The URLs of the key servers providing user keys for users of the Co>Operating System hosts created by the Active>360 installer.

Default value	<i>none</i>
Details	<ul style="list-style-type: none">• This parameter is required when the value of the ab.key.users.source parameter is Server.• This parameter corresponds to the Co>Operating System AB_KEYSERVER_URLS parameter.
Generated YAML example	<pre>ab: key: client: users: urls: - abks://keys1.bigcorp.com:6151 - abks://keys2.bigcorp.com:6151</pre>

ab.key.files

The path to the computer key file for any host on which Active>360 is activated by a computer key.

Default value	<i>none</i>
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Details	<ul style="list-style-type: none">• This parameter is required when the value of either the ab.key.host.source or ab.key.users.source parameter is File.• The Active>360 installer copies the key file from a key host to the specified target installation hosts.
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Syntax	<p><i>target_host: //key_host/key_path</i></p> <p>where:</p> <ul style="list-style-type: none">• <i>target_host</i> is the name or IP address of the host to which the computer key is copied.• <i>key_host</i> is the name or IP address of the host from which the computer key is copied to the <i>target_host</i>.• <i>key_path</i> is the directory path and filename for computer key on the <i>key_host</i>. <p>For example, to install a computer key file named /keydir1/file1.key.txt on a host named host1, enter the value as follows:</p> <pre>host1: //host1/keydir1/file1.key.txt</pre>
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Generated YAML example	<pre>ab: key: files: host1: //host1/keydir1/file1.key.txt host2: //host2/keydir2/file2.key.txt</pre>
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ab.key.host.source

(Required) A Boolean value that specifies whether the Ab Initio license keys for Active>360 hosts are activated by computer-keys files or through a key server.

Default value	Server
Valid values	This value must be one of the following: <ul style="list-style-type: none">• Server (default) — Host keys are activated from a key server.• File — Host keys are activated from computer-key files.
Details	<ul style="list-style-type: none">• When the value is Server, a value is required for the ab.key.client.host.urls parameter.• When the value is File, a value is required for the ab.key.files parameter.• All target Active>360 installation host machines must be listed in the key bundle on the specified key server.
Generated YAML example	<pre>ab: key: host: source: server</pre>

ab.key.users.source

(Required) A Boolean value that specifies whether the license keys for Active>360 users are activated by user-key files or through a key server.

Default value	Server
Valid values	This value must be one of the following: <ul style="list-style-type: none">• Server (default) — User keys are activated from a key server.• File — User keys are activated from user-key files.
Details	<ul style="list-style-type: none">• When the value is Server, note the following:<ul style="list-style-type: none">• A value is required for the ab.key.client.users.urls parameters.• The user who performs the Active>360 installation, and all users who run Active>360 jobs after installation, must be listed in the key bundle on the specified key server.• When the value is File, note the following:<ul style="list-style-type: none">• A value is required for the ab.key.files parameter.• The specified user-key file must be valid for the user who performs the Active>360 installation (ab.aiuser_name).
Generated YAML example	<pre>ab: key: users: source: server</pre>

ab.phase

(Required) The value of the AI_PHASE project parameter for Active>360 graph jobs.

Default value	dev
Generated YAML example	<pre>ab: phase: dev</pre>

ab.tcp_port_least

(Required) The first TCP port in the 2000-port range reserved for Co>Operating System processes created by Active>360.

Default value	20000
Details	<ul style="list-style-type: none">• This parameter defines the lower boundary of the range of 2000 TCP ports reserved for Co>Operating System processes created by Active>360; for example, graph and plan jobs.• The Active>360 installer reserves the same range of ports on every target installation host.• Set this parameter in conjunction with the ab.tcp_port_most parameter.• This parameter is separate from and unaffected by the act.base_port_prefix parameter.• For more information, see "Active>360 Co>Operating System ports".
Generated YAML example	<pre>ab: tcp_port_least: 20000</pre>

ab.tcp_port_most

(Required) The last TCP port in the 2000-port range reserved for Co>Operating System processes created by Active>360.

Default value	22000
Details	<ul style="list-style-type: none">• This parameter defines the upper boundary of the range of 2000 TCP ports reserved for Co>Operating System processes created by Active>360; for example, graph and plan jobs.• The Active>360 installer reserves the same range of ports on every target installation host.• Set this parameter in conjunction with the ab.tcp_port_least parameter.• This parameter is separate from and unaffected by the act.base_port_prefix parameter.• For more information, see "Active>360 Co>Operating System ports".
Generated YAML example	<pre>ab: tcp_port_most: 22000</pre>

ab.tmp_dir

(Required) The filesystem directory where temporary files created by the Active>360 installer are written.

Default value	/tmp
Details	<ul style="list-style-type: none">• The directory must exist before running the Active>360 installer.• The ab.aiuser_name user account must have read, write, and execute privileges for this directory.• This parameter applies to temporary files created by the Active>360 installer, not to temporary files created by Active>360 processes after installation.• The value can point to any directory; however, the value typically corresponds to the TMPDIR directory in the shell environment where the Active>360 installer is run.• For more information, see "Choosing a temporary directory".
Generated YAML example	<pre>ab: tmp_dir: /tmp</pre>

ab.truststore.password

The plaintext password for the TLS/SSL encryption key specified by the [ab.truststore.path](#) parameter.

Default value	<i>none</i>
Details	<ul style="list-style-type: none">• Set this parameter in combination with the ab.truststore.path and ab.truststore.type parameters.• Specify a plaintext password, not an encrypted password.• The Active>360 installer encrypts the password when it configures the relevant Ansible playbooks.
Generated YAML example	<pre>ab: truststore: password: trustpassword</pre>

ab.truststore.path

The full directory path and filename of the TLS/SSL truststore required to run Active>360 subsystems, graphs, and plans.

Default value	<code>/etc/ssl/keystores/truststore.jks</code>
Details	<ul style="list-style-type: none">• Set this parameter in combination with the ab.truststore.type and ab.truststore.password parameters.• The path must be valid on the Active>360 administration host and all target installation hosts.
Generated YAML example	<pre>ab: truststore: path: /etc/ssl/keystores/truststore.jks</pre>

ab.truststore.type

The type of TLS/SSL truststore specified by the [ab.truststore.path](#) parameter.

Default value	<code>JKS</code>
Details	<ul style="list-style-type: none">• Set this parameter in combination with the ab.truststore.path and ab.truststore.password parameters.• The value is not case-sensitive.
Generated YAML example	<pre>ab: truststore: type: jks</pre>

ab.use_systemd

A Boolean value that specifies whether the Active>360 installer configures core Active>360 subsystems as **systemd** services.

Default value	False
Valid values	This value must be one of the following: <ul style="list-style-type: none">• True — The installer configures systemd services.• False (default) — The installer does not configure systemd services.
Details	<ul style="list-style-type: none">• When this value is True, note the following:<ul style="list-style-type: none">• The value of the ab.can_become_root parameter must be True.• The user account for the Active>360 installation owner (ab.aiuser_name) user must have passwordless sudo privileges on the installation script host and all target installation hosts.• For more information, see "Configuring Active>360 systemd services".
Generated YAML example	<pre>ab: use_systemd: false</pre>

act.base_port_prefix

(Required) The port prefix for TCP listener ports in the 100-port range reserved for Active>360 applications and subsystems.

Default value	290
Details	<ul style="list-style-type: none">• We recommend an integer value not lower than 150 and not higher than 316.• This value is prepended to the hard-coded port offsets for Active>360 applications and subsystems. For example, the hard-coded port offset for the Active>360 observability database is 51. If the value of act.base_port_prefix is 290, then the TCP listener port for the observability database is 29051: $290 + 51 = 29051$• The Active>360 installer reserves the same 100-port range on the Active>360 administration host and all target installation hosts.• This parameter is separate from and unaffected by the ab.tcp_port_least and ab.tcp_port_most parameters.• For more information, see "Allocating TCP ports".
Generated YAML example	<pre>act: base_port_prefix: 290</pre>

act.bridge.https_cert_file

The directory path and name of the HTTPS certificate file for the Active>360 **ab-bridge** configuration.

Default value	<i>none</i>
Details	<ul style="list-style-type: none">• This parameter is required when the value of the act.bridge.protocol parameter is HTTPS.• The path must be valid on the Active>360 administration host and all target installation hosts.
Generated YAML example	<pre>act: bridge: https_cert_file: /disk1/certs/this.crt</pre>

act.bridge.https_key_file

The directory path and filename of the encryption key for the certificate specified by the [act.bridge.https_cert_file](#) parameter.

Default value	<i>none</i>
Details	<ul style="list-style-type: none">• Set this parameter in combination with the act.bridge.https_cert_file parameter.• The path must be valid on the Active>360 administration host and all target installation hosts.
Generated YAML example	<pre>act: bridge: https_key_file: /disk1/keys/crt.key</pre>

act.bridge.https_key_password

The plaintext password for the private certificate key specified by the [act.bridge.https_key_file](#) parameter.

Default value	<i>none</i>
Details	<ul style="list-style-type: none">• Set this parameter in combination with the act.bridge.https_key_file parameter.• Specify a plaintext password, not an encrypted password.• The Active>360 installer encrypts the password when it configures the relevant Ansible playbooks.
Generated YAML example	<pre>act: bridge: https_key_password: keypassword</pre>

act.bridge.protocol

The transport protocol for the Active>360 **ab-bridge**.

Default value	HTTP
Valid values	This value must be one of the following: <ul style="list-style-type: none">• HTTP (default) — The bridge uses the HTTP protocol.• HTTPS — The bridge uses the HTTPS protocol.
Details	<ul style="list-style-type: none">• Set this parameter in combination with the act.bridge.https_cert_file parameter.• The value is not case-sensitive.
Generated YAML example	<pre>act: bridge: protocol: http</pre>

act.bridge.rpc_key

(Required) The plaintext RPC key (password) for the Active>360 **ab-bridge** configuration.

Default value	ab-initio-bridge-pw
Details	<ul style="list-style-type: none">• Specify a plaintext password, not an encrypted password.• The Active>360 installer encrypts the password when it configures the relevant Ansible playbooks.
Generated YAML example	<pre>act: bridge: rpc_key: ab-initio-bridge-pw</pre>

act.config_dir

(Required) The directory where the Active>360 installer stores its generated configuration files.

Default value	<code>\${act.data_root}/config</code>
Details	<ul style="list-style-type: none">• On the Active>360 administration host, this directory contains all configuration files generated by the Active>360 installer.• On target installation hosts, this directory contains a subset of generated configuration files, which vary by installation configuration.• The path must be valid on the Active>360 administration host and all target installation hosts.
Generated YAML example	<pre>act: config_dir: \${act.data_root}/config</pre>