
AHPTool Documentation

AHPTool is a command-line interface for AnthillPro that provides communication between agent-side commands, scripting and the AnthillPro central server. AHPTool is focused on setting and retrieving information from the AnthillPro server in the context of a running workflow: It can be used to look up or set properties at the system, step, request, job, Build Life and agent levels. AHPTool can upload and retrieve Test, Coverage, Analytics, or Issue data in the form of an XML document to AnthillPro -- making it an excellent integration point for writing your own Plugin or script.

Common usage. AHPTool is used by automation engineers and AnthillPro Plugin developers looking to stream-line communication between Plugins or scripts run on the agent and the AnthillPro server -- including the lookup of properties. For example, AHPTool enables you to write an integration with your custom testing tool. Following the AHPTool schemas, you can transform the tool's output into AnthillPro XML, and then feeds that file into AHPTool for upload.

AHPTool is packaged with every AnthillPro agent. To access it, go to the agent's `/bin` directory and run either the `ahptool.sh` or `ahptool.cmd` file. This will show you all the available commands and arguments. Alternately, you can download the agent-only installer from Supportal [<http://support.urbancode.com/>].

AHPTool Commands and Arguments

```
ahptool [global-args...] [args...] command [-] [filename]
```

`command`

One of the named commands below in the Commands section

-

Read XML input from the ahptool stdin. See command for requirements.

`filename`

Read XML input from a file with the given filename. See command for requirements.

Global Args:

`-authtoken`

Optional. Can be set as `AH_AUTH_TOKEN` in the environment. A authentication token generated by the Anthill server. `authtoken` or a `username/password` is required.

`-password`

Optional. A password to authenticate with the Anthill server. `authtoken` or a `username/password` is required.

`-username`

Optional. A username to authenticate with the Anthill server. `authtoken` or a `username/password` is required.

`-weburl`

Required. Can be set as `AH_WEB_URL` in the environment. The base URL of the Anthill server. Eg. `https://anthill.domain.com:8443`

Commands:

`addIssues`

Add issues attached to source changes. Requires XML input.

`-buildlife`

Required. Can be set via the environment variable `AH_BUILD_LIFE_ID`.
The build life id to add issues to.

`addSourceAnalytics`

Add a source analytics report to a build life. Requires XML input.

`-builidlife`

Required. Can be set via the environment variable `AH_BUILD_LIFE_ID`.
The id of the build life to add the report to.

`-report`

Required. The name of the report.

`addSourceChanges`

Add source changes for a build life. Requires XML input.

`-builidlife`

Required. Can be set via the environment variable `AH_BUILD_LIFE_ID`.
The id of the build life to add the source changes to.

`addTestCoverage`

Add a test coverage report to a build life. Requires XML input.

`-builidlife`

Required. Can be set via the environment variable `AH_BUILD_LIFE_ID`.
The id of the build life to add the report to.

`-report`

Required. The name of the report.

`addTests`

Add a test report to a build life. Requires XML input.

`-builidlife`

Required. Can be set via the environment variable `AH_BUILD_LIFE_ID`.
The id of the build life to add the report to.

`-report`

Required. The name of the report.

`getAgentProperties`

Get properties of a agent configuration.. To get all properties in XML form, do not give a value for 'property'. To get just the text value of a property, give a property name for 'property'.

`-agent`

Required. The id of the agent to get the properties from.

`-property`

Optional. The name of the property to get the value of.

`getBuildLifeProperties`

Get properties of a build life.. To get all properties in XML form, do not give a value for 'property'. To get just the text value of a property, give a property name for 'property'.

`-builidlife`

Required. Can be set via the environment variable `AH_BUILD_LIFE_ID`.
The id of the build life to get the properties from.

`-property`

Optional. The name of the property to get the value of.

`getDependencyPlan`

Get all dependencies for a build life. This includes transitive dependencies.

-buildlife
Required. Can be set via the environment variable AH_BUILD_LIFE_ID.
The id of the build life.

getIssues

Get issues related to a build life through source changes.

-buildlife
Required. Can be set via the environment variable AH_BUILD_LIFE_ID.
The build life id to get issues from.

getJobProperties

Get properties of a job execution.. To get all properties in XML form, do not give a value for 'property'. To get just the text value of a property, give a property name for 'property'.

-job
Required. Can be set via the environment variable AH_JOB_ID. The id of the job execution to get the properties from.

-property
Optional. The name of the property to get the value of.

getRequestProperties

Get properties of a request.. To get all properties in XML form, do not give a value for 'property'. To get just the text value of a property, give a property name for 'property'.

-request
Required. The id of the request to get the properties from.

-property
Optional. The name of the property to get the value of.

getSourceAnalytics

Get a source analytics report of a build life.

-buildlife
Required. Can be set via the environment variable AH_BUILD_LIFE_ID.
The id of the build life to get the report from.

-report
Required. The name of the report.

getSourceChanges

Get source changes of a build life.

-buildlife
Required. Can be set via the environment variable AH_BUILD_LIFE_ID.
The id of the build life to get the source changes from.

getStepProperties

Get properties of a step execution.. To get all properties in XML form, do not give a value for 'property'. To get just the text value of a property, give a property name for 'property'.

-job
Required. Can be set via the environment variable AH_JOB_ID. The id of the step's job execution to get the properties from.

-step

Optional. The index of the step within the job execution or 'current' for the latest step.

-property
Optional. The name of the property to get the value of.

getSystemProperties

Get properties of a global system scope. To get all properties in XML form, do not give a value for 'property'. To get just the text value of a property, give a property name for 'property'.

-property
Optional. The name of the property to get the value of.

getTestCoverage

Get a test coverage report of a build life.

-buildlife
Required. Can be set via the environment variable AH_BUILD_LIFE_ID. The id of the build life to get the report from.

-report
Required. The name of the report.

getTests

Get a test report of a build life.

-buildlife
Required. Can be set via the environment variable AH_BUILD_LIFE_ID. The id of the build life to get the report from.

-report
Required. The name of the report.

getWorkDir

Get the current working directory of a job execution.

-job
Required. Can be set via the environment variable AH_JOB_ID. The id of the job to get the working directory from.

setAgentProperties

Set properties on a agent configuration. Requires XML input.

-agent
Required. The id of the agent to set the properties on.

setBuildLifeProperties

Set properties on a build life. Requires XML input.

-buildlife
Required. Can be set via the environment variable AH_BUILD_LIFE_ID. The id of the build life to set the properties on.

setJobProperties

Set properties on a job execution. Requires XML input.

-job
Required. Can be set via the environment variable AH_JOB_ID. The id of the job execution to set the properties on.

setRequestProperties

Set properties on a request. Requires XML input.

```

-request
    Required. The id of the request to set the properties on.

setStepProperties
    Set properties on a step execution. Requires XML input.

-job
    Required. Can be set via the environment variable AH_JOB_ID. The id
    of the step's job execution to set the properties on.

-step
    Optional. The index of the step within the job execution or
    'current' for the latest step.

setSystemProperties
    Set properties on a global system scope. Requires XML input.

    No options for this command.

setWorkDir
    Set the current working directory of a job execution. This blocks until
    the lock is acquired. Requires XML input.

-job
    Required. Can be set via the environment variable AH_JOB_ID. The id
    of the job to set the working directory for.

```

AHPTool Schemas

Issues Schema

```

<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <xsd:complexType name="Issues">
    <xsd:sequence>
      <xsd:element name="issue" type="Issue" minOccurs="0" maxOccurs="unbounded"/>
    </xsd:sequence>
    <xsd:attribute name="date" type="xsd:string" use="required"/>
  </xsd:complexType>
  <xsd:complexType name="Issue">
    <xsd:sequence>
      <xsd:element name="name" type="xsd:string" minOccurs="1"/>
      <xsd:element name="type" type="xsd:string" minOccurs="0"/>
      <xsd:element name="status" type="xsd:string" minOccurs="0"/>
      <xsd:element name="description" type="xsd:string" minOccurs="0"/>
    </xsd:sequence>
    <xsd:attribute name="issue-tracker" type="xsd:string" use="required"/>
    <xsd:attribute name="id" type="xsd:string" use="required"/>
    <xsd:attribute name="change-id" type="xsd:long" use="optional"/>
  </xsd:complexType>
  <xsd:element name="issues" type="Issues"/>
</xsd:schema>

```

Properties Schema

```

<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <xsd:complexType name="Properties">
    <xsd:sequence>
      <xsd:element name="property" type="Property" minOccurs="0"

```

```
        maxOccurs="unbounded"/>
    </xsd:sequence>
</xsd:complexType>

<xsd:complexType name="Property">
    <xsd:simpleContent>
        <xsd:extension base="xsd:string">
            <xsd:attribute name="name" type="xsd:string" use="required"/>
            <xsd:attribute name="secure" type="xsd:boolean"/>
        </xsd:extension>
    </xsd:simpleContent>
</xsd:complexType>

<xsd:element name="properties" type="Properties"/>

</xsd:schema>
```

SCM Change Log Schema

```
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema">

    <xsd:complexType name="ChangeLog">
        <xsd:sequence>
            <xsd:element name="log-info" type="ChangeLogInfo" minOccurs="0"
                maxOccurs="1"/>
            <xsd:element name="change-set" type="ChangeSet" minOccurs="0"
                maxOccurs="unbounded"/>
        </xsd:sequence>
    </xsd:complexType>

    <xsd:complexType name="ChangeLogInfo">
        <xsd:sequence>
            <xsd:element name="build-life" type="xsd:long" minOccurs="1"
                maxOccurs="1"/>
        </xsd:sequence>
    </xsd:complexType>

    <xsd:complexType name="ChangeSet">
        <xsd:sequence>
            <xsd:element name="repository-id" type="xsd:string" minOccurs="1"
                maxOccurs="1"/>
            <xsd:element name="repository-type" type="xsd:string" minOccurs="1"
                maxOccurs="1"/>
            <xsd:element name="anthill-id" type="xsd:long" minOccurs="0"
                maxOccurs="1"/>
            <xsd:element name="id" type="xsd:string" minOccurs="0"
                maxOccurs="1"/>
            <xsd:element name="user" type="xsd:string" minOccurs="1"
                maxOccurs="1"/>
            <xsd:element name="module" type="xsd:string" minOccurs="0"
                maxOccurs="1"/>
            <xsd:element name="branch" type="xsd:string" minOccurs="0"
                maxOccurs="1"/>
            <xsd:element name="date" type="date_time" minOccurs="1"
                maxOccurs="1"/>
            <xsd:element name="file-set" type="FileSet" minOccurs="1"
                maxOccurs="1"/>
            <xsd:element name="properties" type="Properties" minOccurs="1"
                maxOccurs="1"/>
            <xsd:element name="comment" type="xsd:string" minOccurs="0"
                maxOccurs="1"/>
        </xsd:sequence>
```

```
</xsd:complexType>
<xsd:complexType name="FileSet">
  <xsd:sequence>
    <xsd:element name="file" type="Change" minOccurs="1"
      maxOccurs="unbounded"/>
  </xsd:sequence>
</xsd:complexType>

<xsd:complexType name="Change">
  <xsd:simpleContent>
    <xsd:extension base="xsd:string">
      <xsd:attribute name="change-type" type="change_type"/>
      <xsd:attribute name="revision-number" type="xsd:string"/>
    </xsd:extension>
  </xsd:simpleContent>
</xsd:complexType>

<xsd:complexType name="Properties">
  <xsd:sequence>
    <xsd:element name="property" type="Property" minOccurs="0"
      maxOccurs="unbounded"/>
  </xsd:sequence>
</xsd:complexType>

<xsd:complexType name="Property">
  <xsd:sequence>
    <xsd:element name="name" type="xsd:string" minOccurs="1" maxOccurs="1"/>
    <xsd:element name="value" type="xsd:string" minOccurs="1" maxOccurs="1"/>
  </xsd:sequence>
</xsd:complexType>

<xsd:simpleType name="change_type">
  <xsd:restriction base="xsd:string">
    <xsd:enumeration value="A"/>
    <xsd:enumeration value="M"/>
    <xsd:enumeration value="D"/>
  </xsd:restriction>
</xsd:simpleType>

<!-- "yyyy-MM-dd HH:mm:ss Z" -->
<xsd:simpleType name="date_time">
  <xsd:restriction base="xsd:string">
    <xsd:pattern value="\d{4}-([0][1-9]|[1][0-2])-([0][1-9]|[2][0-9]|[3][0-1]) ([0-1][0-9]|[2][0-3]):[0-5][0-9]:[0-5][0-9].[0-9]+ .+"/>
  </xsd:restriction>
</xsd:simpleType>

<xsd:element name="change-log" type="ChangeLog"/>
</xsd:schema>
```

Source-analytics Schema

```
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <xsd:complexType name="SourceAnalytics">
    <xsd:sequence>
      <xsd:element name="finding" type="Finding" minOccurs="0"
        maxOccurs="unbounded"/>
    </xsd:sequence>
    <xsd:attribute name="name" type="xsd:string" use="required"/>
  </xsd:complexType>
</xsd:schema>
```

```

    <xsd:attribute name="type" type="xsd:string" use="required"/>
    <xsd:attribute name="buildLifeId" type="xsd:long" use="required"/>
    <xsd:attribute name="urlLink" type="xsd:string" use="optional"/>
    <xsd:attribute name="findingUrlLink" type="xsd:string" use="optional"/>
  </xsd:complexType>

  <xsd:complexType name="Finding">
    <xsd:sequence>
      <xsd:element name="id" type="xsd:string" minOccurs="0" maxOccurs="1"/>
      <xsd:element name="file" type="xsd:string" minOccurs="0" maxOccurs="1"/>
      <xsd:element name="line" type="xsd:long" minOccurs="0" maxOccurs="1"/>
      <xsd:element name="name" type="xsd:string" minOccurs="0" maxOccurs="1"/>
      <xsd:element name="severity" type="xsd:string" minOccurs="0"
        maxOccurs="1"/>
      <xsd:element name="description" type="xsd:string" minOccurs="0"
        maxOccurs="1"/>
      <xsd:element name="status" type="xsd:string" minOccurs="0" maxOccurs="1"/>
    </xsd:sequence>
  </xsd:complexType>

  <xsd:element name="analytics" type="SourceAnalytics"/>
</xsd:schema>

```

Test-coverage Report Schema

```

<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <xsd:complexType name="CoverageReport">
    <xsd:sequence>
      <xsd:element name="coverage-groups" type="CoverageGroup" minOccurs="0"
        maxOccurs="unbounded"/>
    </xsd:sequence>
    <xsd:attribute name="name" type="xsd:string" use="required"/>
    <xsd:attribute name="type" type="xsd:string" use="required"/>
    <xsd:attribute name="job-id" type="xsd:long" use="required"/>
    <xsd:attribute name="line-percentage" type="xsd:double" use="optional"/>
    <xsd:attribute name="method-percentage" type="xsd:double" use="optional"/>
    <xsd:attribute name="branch-percentage" type="xsd:double" use="optional"/>
  </xsd:complexType>

  <xsd:complexType name="CoverageGroup">
    <xsd:attribute name="name" type="xsd:string" use="required"/>
    <xsd:attribute name="line-percentage" type="xsd:double" use="optional"/>
    <xsd:attribute name="method-percentage" type="xsd:double" use="optional"/>
    <xsd:attribute name="branch-percentage" type="xsd:double" use="optional"/>
    <xsd:attribute name="complexity" type="xsd:double" use="optional"/>
  </xsd:complexType>

  <xsd:element name="coverage-report" type="CoverageReport"/>
</xsd:schema>

```

Test Report Schema

```

<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <xsd:complexType name="TestReport">
    <xsd:sequence>
      <xsd:element name="test-suite" type="TestSuite" minOccurs="0"

```

```
        maxOccurs="unbounded"/>
    </xsd:sequence>
    <xsd:attribute name="name" type="xsd:string" use="required"/>
    <xsd:attribute name="type" type="xsd:string" use="required"/>
    <xsd:attribute name="job-id" type="xsd:long" use="required"/>
    <xsd:attribute name="successes" type="xsd:long" use="optional"/>
    <xsd:attribute name="failures" type="xsd:long" use="optional"/>
</xsd:complexType>

<xsd:complexType name="TestSuite">
    <xsd:sequence>
        <xsd:element name="test" type="Test" minOccurs="0" maxOccurs="unbounded"/>
    </xsd:sequence>
    <xsd:attribute name="name" type="xsd:string" use="required"/>
    <xsd:attribute name="successes" type="xsd:long" use="required"/>
    <xsd:attribute name="failures" type="xsd:long" use="required"/>
</xsd:complexType>

<xsd:complexType name="Test">
    <xsd:sequence>
        <xsd:element name="message" type="xsd:string" minOccurs="0"/>
    </xsd:sequence>
    <xsd:attribute name="name" type="xsd:string" use="required"/>
    <xsd:attribute name="class-name" type="xsd:string" use="optional"/>
    <xsd:attribute name="result" type="TestResult" use="required"/>
    <xsd:attribute name="time" type="xsd:unsignedInt" use="optional"/>
</xsd:complexType>

<xsd:simpleType name="TestResult">
    <xsd:restriction base="xsd:string">
        <xsd:enumeration value="success"/>
        <xsd:enumeration value="failure"/>
        <xsd:enumeration value="error"/>
    </xsd:restriction>
</xsd:simpleType>

<xsd:element name="test-report" type="TestReport"/>

</xsd:schema>
```

Working Directory Schema

```
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema">

    <xsd:complexType name="WorkDir">
        <xsd:simpleContent>
            <xsd:extension base="xsd:string">
                <xsd:attribute name="scope" type="Scope" use="required"/>
            </xsd:extension>
        </xsd:simpleContent>
    </xsd:complexType>

    <xsd:simpleType name="Scope">
        <xsd:restriction base="xsd:string">
            <xsd:enumeration value="job"/>
            <xsd:enumeration value="workflow"/>
        </xsd:restriction>
    </xsd:simpleType>

    <xsd:element name="work-dir" type="WorkDir"/>

</xsd:schema>
```