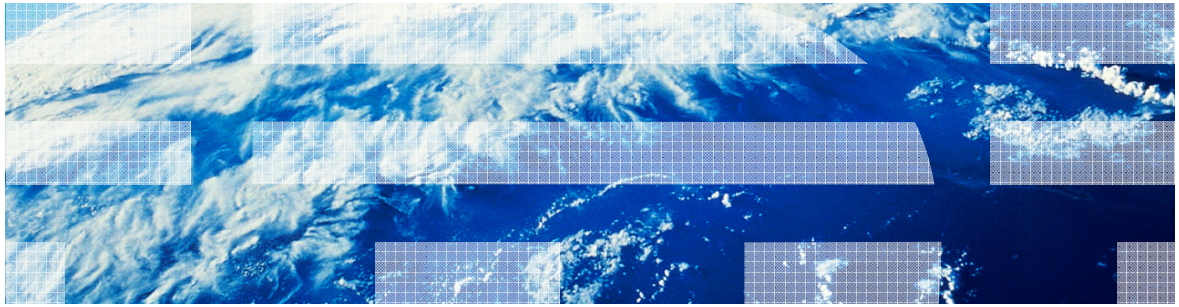
Lifecycle Policies and Actions

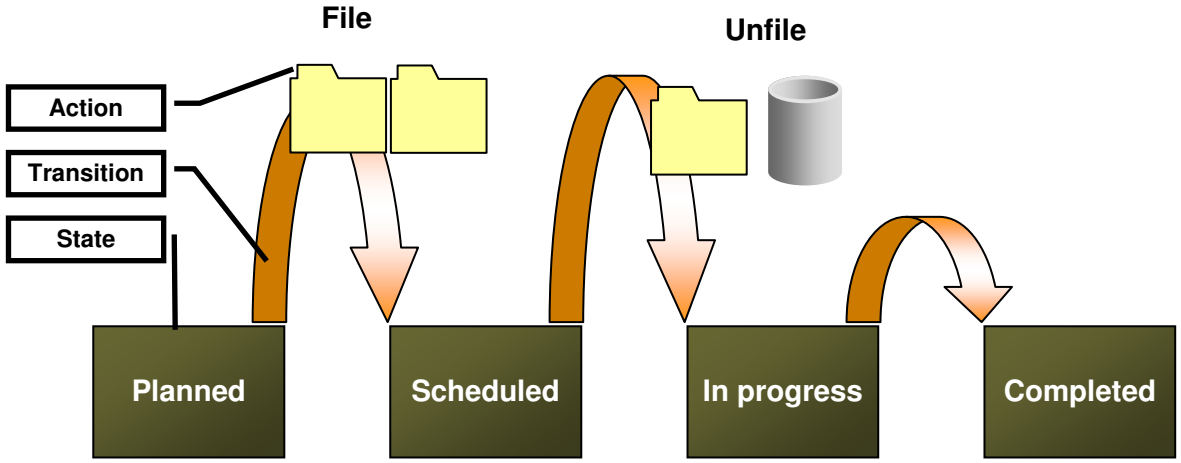


Lifecycle terms

- A Lifecycle consists of two parts:
  - **Lifecycle policy**: The set of states a document can pass through in its lifetime.
  - **Lifecycle action**: The action the system performs when a document moves from one state to another.
- Lifecycle state
  - A state at one point in a lifecycle
  - The current state can be viewed from the Information page.
  - Promotion (move to next state) or demotion (move to prior state)
- Transitions
  - Change from one lifecycle state to another: promotion and demotion (demotion might or might not be allowed)
  - Transitions can take place only between adjacent states.
- Lifecycle Actions
  - State changes can be used to launch lifecycle actions.

Sample lifecycle

- This lifecycle has four states:
  - Planned, Scheduled, In progress, Completed
  - If the object is filed in a particular folder, the state becomes Scheduled.
  - If the object is moved to the database, the state becomes In progress.

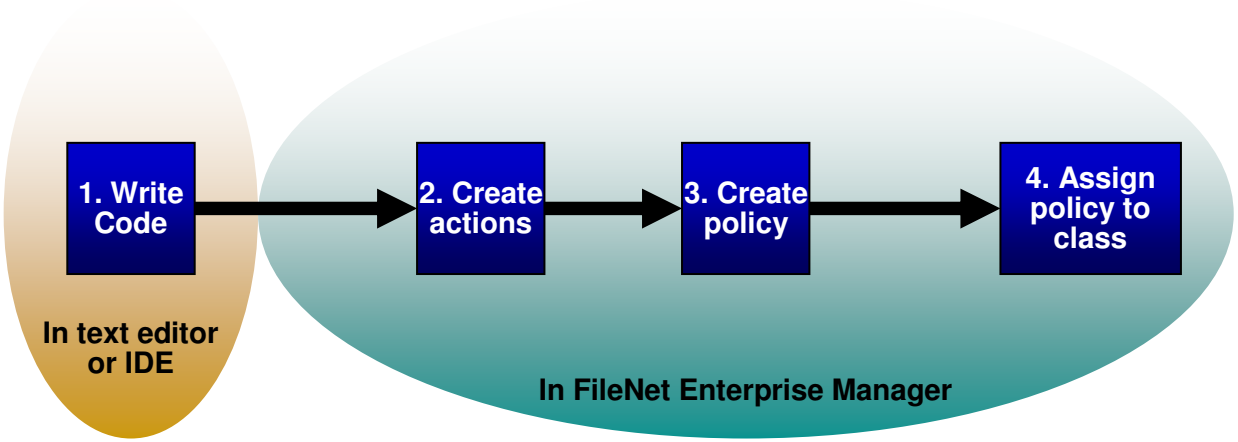


Lifecycle policies

- Use lifecycle policies to define the following:
  - The names and number of states
  - The sequence of states
  - Whether demotion is allowed from a state
  - The actions on state transitions
- Lifecycle policies can be associated with classes.
  - They can also be applied to individual objects.

Using lifecycles: overview

- Write code in a text editor or IDE.
- Do the following in FileNet Enterprise Manager:
  1. Create life cycle actions.
  2. Create a lifecycle policy with an associated action.
  3. Assign the lifecycle policy to a class.



Create a lifecycle policy

- Use FileNet Enterprise Manager.
  1. Navigate to the Document Lifecycle Policies node:
     - Object stores > object store > Document Lifecycles > Document Lifecycle Policies
  2. Select New Lifecycle Policy from the Action menu.
  3. Complete the wizard.
     - Name the lifecycle.
     - Add each lifecycle state (name, whether demotion is allowed).
     - Resequence the steps if necessary.
     - Assign lifecycle actions (if any).

Assign a lifecycle policy to a class

- Lifecycle policy
  - Affects the instantiated objects of the document classes that the policy is assigned to.
- In FileNet Enterprise Manager:
  - Open the Properties page for the target document class.
  - On the General tab, select a lifecycle policy from the Default Document Lifecycle Policy choice list.
- Result
  - Each new object of the target document class is automatically assigned the initial state in the lifecycle policy.
  - The lifecycle states can be manually or programmatically changed.

State changes: promote or demote the state

- Promote a document state
  - Change the document state to the next state.
- Demote a document state
  - Change the document state to the previous state.
- Rules
  - Promotions occur only in the sequence of the states in the lifecycle.
  - Demotion is defined when the state is created if you select the option to allow demotion.
- Life Cycle State field
  - Documents with a lifecycle state have a Life Cycle State field in the Information Properties page.
    - The field has a list of the states in the lifecycle.
    - The user selects the state to change it.

What is a lifecycle action?

- Lifecycle action
  - A Java class that is executed when a document changes states as defined in its lifecycle policy.
- How is the lifecycle action used?
  - The lifecycle action is associated with a lifecycle policy.
  - The lifecycle policy is associated with a document or document class.
  - When a document with that lifecycle policy changes from one lifecycle state to another, the lifecycle action code is executed.

Steps to create a lifecycle action

- Programmer
  1. Creates a Java class that implements the following:
     - DocumentLifecycleActionHandler interface
     - Required methods
- Solution Builder
  2. Obtains the Java class file.
     - Optionally, archive the class files in a JAR file.
  3. Uses Enterprise Manager to:
     - Create the code module and lifecycle action.
     - Associate the lifecycle action with a lifecycle policy.
     - Associate the lifecycle policy with a document class.

Lifecycle action requirements

- Implement DocumentLifecycleActionHandler interface.
- Implement methods:
  - onDocumentClearException(…)
  - onDocumentDemote(…)
  - onDocumentPromote(…)
  - onDocumentResetLifecycle(…)
  - onDocumentSetException(…)
- These methods correspond to the actions available through the following user interfaces:
  - Workplace
  - FileNet Enterprise Manager

Debugging

- What can go wrong
  - Errors in Java classes
  - Missing Java classes
- Debugging
  - Error messages are displayed during actions.
- Examples:
  - Cannot complete operation on this object.
  - The operation failed. Unable to create a lifecycle action handler instance. The Event handler threw an exception.