WorkflowManager

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Description

- org.joget.workflow.model.service.WorkflowManager
- Under wflow-wfengine module
- Service methods to interact with workflow engine

Code Sample

```
import org.joget.apps.app.service.AppUtil;
import org.joget.workflow.model.WorkflowProcessResult;
import org.joget.workflow.model.service.WorkflowManager;

WorkflowManager workflowManager = (WorkflowManager) AppUtil.getApplicationContext().getBean("workflowManager");

String recordId = "001";
String processDefId = "crm#2#process1";

//Start a process with existing record
WorkflowProcessResult result = workflowManager.processStart(processDefId, null, null, null, recordId, boolean
false);
```

Fields

LATEST

```
public static String LATEST = "latest";
```

Keyword used to replace the version number in process definition id to always use the latest version.

Methods

activityAbort

```
public void activityAbort(java.lang.String processId, java.lang.String activityDefId)
```

Abort an activity based on the process instance Id and activity definition ID.

activityVariable

```
public void activityVariable(java.lang.String activityInstanceId, java.lang.String variableId, java.lang.
Object variableValue)
```

Set the workflow variable based on an activity instance ID.

activityVariables

```
public void activityVariables(java.lang.String activityInstanceId, java.util.Map<java.lang.String, java.lang.
String> variables)
```

Set the workflow variables based on an activity instance ID

activityStart

```
public boolean activityStart(java.lang.String processId, java.lang.String activityDefId, boolean
abortRunningActivities)
```

Start a specific activity for a running process instance.

activityStartAndAssignTo

```
public boolean activityStartAndAssignTo(java.lang.String processId, java.lang.String activityDefId, java.
lang.String[] usernames, boolean abortRunningActivities)
```

Start a specific activity for a running process instance, and assign to specific user(s).

assignmentAccept

```
public void assignmentAccept(java.lang.String activityId)
```

Accept an assignment (for the current user) based on the activity instance ID.

Deprecated Since v3, the concept of accept & withdraw assignment is removed

assignmentComplete

```
public void assignmentComplete(java.lang.String activityId)
```

Complete an assignment (for the current user) based on the activity instance ID.

assignmentComplete

```
public void assignmentComplete(java.lang.String activityId, java.util.Map<java.lang.String, java.lang.
String> variableMap)
```

Complete an assignment (for the current user) while setting workflow variable values

assignmentForceComplete

```
public void assignmentForceComplete(java.lang.String processDefId, java.lang.String processId, java.lang.
String activityId, java.lang.String username)
```

Force completes an assignment of a user

assignmentReassign

```
public void assignmentReassign(java.lang.String processDefId, java.lang.String processId, java.lang.String
activityId, java.lang.String username, java.lang.String replaceUser)
```

Reassigns the assignment from a user to another user

assignmentWithdraw

```
public void assignmentWithdraw(java.lang.String activityId)
```

Withdraw an assignment (for the current user) based on the activity instance ID.

Deprecated Since v3, the concept of accept & withdraw assignment is removed.

assignmentVariable

```
public void assignmentVariable(java.lang.String activityId, java.lang.String variableName, java.lang.String
variableValue)
```

Set workflow variable value based on activity instance ID. This only works when the current user is assigned to the activity.

assignmentVariables

```
public void assignmentVariables(java.lang.String activityId, java.util.Map<java.lang.String, java.lang.
String> variableMap)
```

Set workflow variables value based on activity instance ID. This only works when the current user is assigned to the activity.

getActivityById

```
public org.joget.workflow.model.WorkflowActivity getActivityById(java.lang.String activityId)
```

Returns an activity instance based on the activity instance ID.

getActivityInstanceByProcessIdAndStatus

```
public java.util.Map getActivityInstanceByProcessIdAndStatus(java.lang.String processId, java.lang.Boolean
accepted)
```

Gets a map of active activities in a process instance.

Deprecated Since v3, the concept of accept & withdraw assignment is removed.

getActivityList

```
public java.util.Collection<org.joget.workflow.model.WorkflowActivity> getActivityList(java.lang.String
processId, java.lang.Integer start, java.lang.Integer rows, java.lang.String sort, java.lang.Boolean desc)
```

Returns a list of running or completed activities for a process instance ID.

getActivitySize

```
public int getActivitySize(java.lang.String processId)
```

Returns the number of running or completed activities for a process instance ID.

getActivityVariableList

```
public java.util.Collection<org.joget.workflow.model.WorkflowVariable> getActivityVariableList(java.lang.
String activityId)
```

Returns a list of workflow variables for the specified activity instance ID (for any user)

getAssignment

```
public org.joget.workflow.model.WorkflowAssignment getAssignment(java.lang.String activityId)
```

Returns an assignment for the current user based on an activity instance ID.

getAssignmentAcceptedList

```
public org.joget.commons.util.PagedList<org.joget.workflow.model.WorkflowAssignment>
getAssignmentAcceptedList(java.lang.String processDefId, java.lang.String sort, java.lang.Boolean desc, java.
lang.Integer start, java.lang.Integer rows)
```

Returns accepted assignments for the current user.

Deprecated Since v3, the concept of accept & withdraw assignment is removed.

getAssignmentByProcess

```
public org.joget.workflow.model.WorkflowAssignment getAssignmentByProcess(java.lang.String processId)
```

Returns the first assignment for the current user based on a process instance ID.

getAssignmentByRecordId

```
public org.joget.workflow.model.WorkflowAssignment getAssignmentByRecordId(java.lang.String recordId, java.
lang.String processDefId, java.lang.String activityDefId, java.lang.String username)
```

Returns the first assignment based on record ID.

getAssignmentList

```
public java.util.Collection<org.joget.workflow.model.WorkflowAssignment> getAssignmentList(java.lang.Boolean
accepted, java.lang.String processDefId, java.lang.String sort, java.lang.Boolean desc, java.lang.Integer
start, java.lang.Integer rows)
```

Returns a list of assignments for the current user

getAssignmentList

```
public java.util.Collection<org.joget.workflow.model.WorkflowAssignment> getAssignmentList(java.lang.String
packageId, java.lang.String processDefId, java.lang.String processId, java.lang.String sort, java.lang.
Boolean desc, java.lang.Integer start, java.lang.Integer rows)
```

     Returns a list of assignments for the current user.

getAssignmentList

```
public java.util.Collection<org.joget.workflow.model.WorkflowAssignment> getAssignmentList(java.lang.String
packageId, java.lang.String processDefId, java.lang.String processId, java.lang.String activityDefId, java.
lang.String sort, java.lang.Boolean desc, java.lang.Integer start, java.lang.Integer rows)
```

     Returns a list of assignments for the current user.

getAssignmentListFilterByProccessDefIds

```
public java.util.Collection<org.joget.workflow.model.WorkflowAssignment>
getAssignmentListFilterByProccessDefIds(java.lang.String[] processDefIds, java.lang.String sort, java.lang.
Boolean desc, java.lang.Integer start, java.lang.Integer rows)
```

     Returns a list of assignments for the current user filter by processDefIds

getAssignmentListFilterByProccessDefIdsSize

```
public int getAssignmentListFilterByProccessDefIdsSize(java.lang.String[] processDefIds)
```

     Returns the number of assignments for the current user filter by processDefIds.

getAssignmentListLite

```
public java.util.Collection<org.joget.workflow.model.WorkflowAssignment> getAssignmentListLite(java.lang.
String packageId, java.lang.String processDefId, java.lang.String processId, java.lang.String activityDefId,
java.lang.String sort, java.lang.Boolean desc, java.lang.Integer start, java.lang.Integer rows)
```

     Returns a list of assignments with lite info for the current user.

getAssignmentPendingAndAcceptedList

```
public org.joget.commons.util.PagedList<org.joget.workflow.model.WorkflowAssignment>
getAssignmentPendingAndAcceptedList(java.lang.String packageId, java.lang.String processDefId, java.lang.
String processId, java.lang.String sort, java.lang.Boolean desc, java.lang.Integer start, java.lang.Integer
rows)
```

     Returns the all (pending and accepted) assignments for the current user.

getAssignmentPendingList

```
public org.joget.commons.util.PagedList<org.joget.workflow.model.WorkflowAssignment> getAssignmentPendingList
(java.lang.String processDefId, java.lang.String sort, java.lang.Boolean desc, java.lang.Integer start, java.
lang.Integer rows)
```

     Returns pending assignments for the current user

getAssignmentResourceIds

```
public java.util.List<java.lang.String> getAssignmentResourceIds(java.lang.String processId, java.lang.
String processInstanceId, java.lang.String activityInstanceId)
```

     Returns a list of usernames that are assigned to a specific activity instance.

getAssignmentSize

```
public int getAssignmentSize(java.lang.Boolean accepted, java.lang.String processDefId)
```

     Returns the number of assignments for the current user.

getAssignmentSize

```
public int getAssignmentSize(java.lang.String packageId, java.lang.String processDefId, java.lang.String
processId)
```

     Returns the number of assignments for the current user.

getAssignmentSize

```
public int getAssignmentSize(java.lang.String packageId, java.lang.String processDefId, java.lang.String
processId, java.lang.String activityDefId)
```

     Returns the number of assignments for the current user.

getAssignmentVariableList

```
public java.util.Collection<org.joget.workflow.model.WorkflowVariable> getAssignmentVariableList(java.lang.
String activityId)
```

Returns a list of workflow variables for the specified activity instance ID (only if assigned to the current user)

getCompletedProcessList

```
public java.util.Collection<org.joget.workflow.model.WorkflowProcess> getCompletedProcessList(java.lang.
String packageId, java.lang.String processId, java.lang.String processName, java.lang.String version, java.
lang.String sort, java.lang.Boolean desc, java.lang.Integer start, java.lang.Integer rows)
```

Returns a list of completed processes, filtered by optional parameter values.

getCompletedProcessSize

```
public int getCompletedProcessSize(java.lang.String packageId, java.lang.String processId, java.lang.String
processName, java.lang.String version)
```

Returns the number of completed processes, filtered by optional parameter values.

getConvertedLatestProcessDefId

```
public java.lang.String getConvertedLatestProcessDefId(java.lang.String processDefId)
```

Replaces the WorkflowManager.LATEST in process def id to the latest process def id

getCurrentPackageVersion

```
public java.lang.String getCurrentPackageVersion(java.lang.String packageId)
```

Returns the latest package version for the given package ID

getMigrationAssignmentUserList

```
public java.util.List<java.lang.String> getMigrationAssignmentUserList(java.lang.String processId, java.lang.
String activityDefId)
```

Gets the usernames of process activity for process version migration

getMockAssignment

```
public org.joget.workflow.model.WorkflowAssignment getMockAssignment(java.lang.String activityId)
```

Returns a mock assignment based on an activity instance ID.

getPackage

```
public org.joget.workflow.model.WorkflowPackage getPackage(java.lang.String packageId, java.lang.String
version)
```

Retrieve a specific workflow package.

getPackageContent

```
public byte[] getPackageContent(java.lang.String packageId, java.lang.String version)
```

Returns the XPDL content for a package version.

getPackageIdFromDefinition

```
public java.lang.String getPackageIdFromDefinition(byte[] processDefinitionData)
```

Reads package ID from XPDL definition

getPackageList

```
public java.util.Collection<org.joget.workflow.model.WorkflowPackage> getPackageList()
```

Returns a list of packages currently in the system.

getParticipantMap

```
public java.util.Map<java.lang.String, org.joget.workflow.model.WorkflowParticipant> getParticipantMap(java.
lang.String processDefId)
```

Returns the participant definitions for a process definition ID in a map.

`public org.joget.workflow.model.WorkflowProcess getProcess(java.lang.String processDefId)`

Returns a process definition by its definition ID.

`public java.util.Collection<org.joget.workflow.model.WorkflowActivity> getProcessActivityDefinitionList(java.lang.String processDefId)`

Returns the activity definitions for a process definition ID.

`public java.util.Collection<org.joget.workflow.model.WorkflowActivity> getProcessActivityDefinitionList(java.lang.String processDefId)`

Returns the activity definitions for a process definition ID.

`public java.lang.String getProcessDefIdByInstanceId(java.lang.String instanceId)`

Returns a process definition ID based on a process instance ID.

`public java.util.Collection<org.joget.workflow.model.WorkflowProcess> getProcessList(java.lang.String packageId)`

Returns a list of process definitions.

`public java.util.Collection<org.joget.workflow.model.WorkflowProcess> getProcessList(java.lang.String packageId, java.lang.String version)`

Returns a list of process definitions.

`public org.joget.commons.util.PagedList<org.joget.workflow.model.WorkflowProcess> getProcessList(java.lang.String sort, java.lang.Boolean desc, java.lang.Integer start, java.lang.Integer rows, java.lang.String packageId, java.lang.Boolean all, java.lang.Boolean checkWhiteList);`

Returns a list of process definitions

`public java.util.Collection<org.joget.workflow.model.WorkflowParticipant> getProcessParticipantDefinitionList(java.lang.String processDefId)`

Returns the participant definitions for a process definition ID.

`public java.util.Collection<org.joget.workflow.model.WorkflowTool> getProcessToolDefinitionList(java.lang.String processDefId)`

Returns the application definitions for a process definition ID.

`public java.lang.String getProcessVariable(java.lang.String processInstanceId, java.lang.String variableId)`

Returns the variable value based on a process instance ID.

`public java.util.Collection<org.joget.workflow.model.WorkflowVariable> getProcessVariableDefinitionList(java.lang.String processDefId)`

Returns the variable definitions for a process definition ID.

`public java.util.Collection<org.joget.workflow.model.WorkflowVariable> getProcessVariableList(java.lang.String processId)`

Returns a list of workflow variables for the specified process instance ID (for any user)

getServiceLevelMonitorForRunningActivity

`public double getServiceLevelMonitorForRunningActivity(java.lang.String activityInstanceId)`

Gets the service level for a specific activity instance ID.

getServiceLevelMonitorForRunningProcess

`public double getServiceLevelMonitorForRunningProcess(java.lang.String processInstanceId)`

Gets the service level for a specific process instance ID.

getRunningActivityInfo

`public org.joget.workflow.model.WorkflowActivity getRunningActivityInfo(java.lang.String activityInstanceId)`

Returns activity monitoring info (eg date creation, limit, due (creation + limit), delay and completion) for a process instance ID.

getRunningProcessById

`public org.joget.workflow.model.WorkflowProcess getRunningProcessById(java.lang.String processId)`

Returns a running process by process instance ID.

getRunningProcessInfo

`public org.joget.workflow.model.WorkflowProcess getRunningProcessInfo(java.lang.String processInstanceId)`

Returns process monitoring info (eg date creation, due dates, etc) for a process instance ID.

getRunningProcessList

`public java.util.Collection<org.joget.workflow.model.WorkflowProcess> getRunningProcessList(java.lang.String packageId, java.lang.String processId, java.lang.String processName, java.lang.String version, java.lang.String sort, java.lang.Boolean desc, java.lang.Integer start, java.lang.Integer rows)`

Returns a list of running processes, filtered by optional parameter values.

getRunningProcessSize

`public int getRunningProcessSize(java.lang.String packageId, java.lang.String processId, java.lang.String processName, java.lang.String version)`

Returns the number of running processes, filtered by optional parameter values.

getUserByProcessIdAndActivityDefId

`public java.lang.String getUserByProcessIdAndActivityDefId(java.lang.String processDefId, java.lang.String processId, java.lang.String activityDefId)`

Returns the name of the user that accepted/completed activity.

Parameters:

processDefId - Unsed for now

getWorkflowProcessLink

`public org.joget.workflow.model.WorkflowProcessLink getWorkflowProcessLink(java.lang.String processId)`

Gets the parent process instance id of a process instance

getWorkflowUserManager

`public org.joget.workflow.model.service.WorkflowUserManager getWorkflowUserManager()`

Method used by system to get WorkflowUserManager implementation

internalCheckDeadlines

`public java.lang.Boolean internalCheckDeadlines(java.lang.String[] pids)`

Internal method used to checks deadlines for selected process instances

internalCheckDeadlines

`public void internalCheckDeadlines(int instancesPerTransaction, int failuresToIgnore)`

Internal method used to checks deadlines

internalDeleteWorkflowProcessLink

```
public void internalDeleteWorkflowProcessLink(org.joget.workflow.model.WorkflowProcessLink wfProcessLink)
```

Internal method used to delete the processes link

internalRemoveProcessOnComplete

```
public void internalRemoveProcessOnComplete(java.lang.String procInstanceId)
```

Internal method used to delete a process instance only if it is completed.

internalUpdateDeadlineChecker

```
public void internalUpdateDeadlineChecker()
```

Internal method used to updates deadline checker time interval

isAssignmentExist

```
public java.lang.Boolean isAssignmentExist(java.lang.String activityId)
```

Check an assignment is exist or not (for current user) based on an activity instance ID.

isPackageIdExist

```
public java.lang.Boolean isPackageIdExist(java.lang.String packageId)
```

Checks to see whether or not package exists.

isUserInWhiteList

```
public java.lang.Boolean isUserInWhiteList(java.lang.String processDefId)
```

Checks the current user is allow to start a process

processAbort

```
public java.lang.Boolean processAbort(java.lang.String processId)
```

Abort a process instance.

processCopyFromInstanceId

```
public org.joget.workflow.model.WorkflowProcessResult processCopyFromInstanceId(java.lang.String
currentProcessId, java.lang.String newProcessDefId, java.lang.Boolean abortCurrentProcess)
```

Start a new process while copying variables, form data and running activities from a previous running process instance.

processCreateWithoutStart

```
public java.lang.String processCreateWithoutStart(java.lang.String processDefId)
```

Create a process instance without starting any activities.

processDeleteAndUnload

```
public void processDeleteAndUnload(java.lang.String packageId)
```

Deletes all versions for a package together with its associated process instances.

processDeleteAndUnloadVersion

```
public void processDeleteAndUnloadVersion(java.lang.String packageId, java.lang.String version)
```

Deletes a specific package version together with its process instances.

processStart

```
public org.joget.workflow.model.WorkflowProcessResult processStart(java.lang.String processDefId)
```

Starts a process based on the process definition ID.

processStart

```
public org.joget.workflow.model.WorkflowProcessResult processStart(java.lang.String processDefId, java.util.
Map<java.lang.String, java.lang.String> variables)
```

Starts a process based on the process definition ID, while setting workflow variables values

processStart

```
public org.joget.workflow.model.WorkflowProcessResult processStart(java.lang.String processDefId, java.util.
Map<java.lang.String, java.lang.String> variables, java.lang.String startProcUsername)
```

Starts a process based on the process definition ID, while setting workflow variables values and start process username.

processStart

```
public org.joget.workflow.model.WorkflowProcessResult processStart(java.lang.String processDefId, java.lang.
String processId, java.util.Map<java.lang.String, java.lang.String> variables, java.lang.String
startProcUsername, java.lang.String parentProcessId, java.lang.Boolean startManually)
```

Generic method to start a process with various options.

Parameters:

processDefId - The process definition ID of the process to start

processId - The process instance ID of a current running process to start

variables - Workflow variables values to set for the process

startProcUsername - The username of the person starting the process

parentProcessId - The process instance ID of a parent or calling process

startManually - Set to true to prevent beginning activities from being started.

processStartWithInstanceId

```
public org.joget.workflow.model.WorkflowProcessResult processStartWithInstanceId(java.lang.String
processDefId, java.lang.String processId, java.util.Map<java.lang.String, java.lang.String> variables)
```

Starts a process based on the process definition ID, while setting workflow variables values, start process username and parent process id.

processStartWithLinking

```
public org.joget.workflow.model.WorkflowProcessResult processStartWithLinking(java.lang.String processDefId,
java.util.Map<java.lang.String, java.lang.String> variables, java.lang.String startProcUsername, java.lang.
String parentProcessId)
```

Starts a process based on the process definition ID, while setting workflow variables values, start process username and parent process id.

processUpload

```
public java.lang.String processUpload(java.lang.String packageId, byte[] processDefinitionData) throws
Exception
```

Upload a package XPDL together with forms, participant and activity mapping information

processUploadWithoutUpdateMapping

```
public java.lang.String processUploadWithoutUpdateMapping(java.lang.String packageId, byte[]
processDefinitionData) throws Exception
```

Upload a package XPDL without updating mapping information

processVariable

```
public void processVariable(java.lang.String processInstanceId, java.lang.String variableId, java.lang.
Object variableValue)
```

Set the workflow variable based on an process instance ID.

processVariables

```
public void processVariables(java.lang.String processInstanceId, java.util.Map<java.lang.String, java.lang.
String> variables)
```

Set the workflow variables based on an process instance ID.

reevaluateAssignmentsForActivity

```
public void reevaluateAssignmentsForActivity(java.lang.String activityInstanceId)
```

Reevaluate assignments for an activity based on an activity instance ID.

reevaluateAssignmentsForProcess

```
public void reevaluateAssignmentsForProcess(java.lang.String procInstanceId)
```

Reevaluate assignments for a process based on an process instance ID.

reevaluateAssignmentsForUser

public void reevaluateAssignmentsForUser(java.lang.String username)

Reevaluate assignments for an user

removeProcessInstance

public void removeProcessInstance(java.lang.String procInstanceId)

Deletes a process instance.

setWorkflowUserManager

public void setWorkflowUserManager(WorkflowUserManager userManager)

Method used by system to sets WorkflowUserManager implementation