Package SKUs

# Actors

DDC System

# Activities

## 1. Fetch the distribution profile

Retrieve the distribution profile for the designated content provider.

## 2. Verify mandatory SKUs availability

Certain SKUs are mandatory, certain ones are not. Verify the availability of those SKUs that are mandatory.

## 4. Check the SKUs presence

Decision node with two outcomes:  
1. "Yes" -- the SKUs are present, proceed.  
2. "No" -- the SKUs are missing, notify and end.

## 5b. Notify workflow

Send a message back to the workflow manager about problems incurred.

## 5a. Fetch transport profile

Retrieve the transport profile for the designated content provider.

## 6a. Fetch the data map

Retrieve the data map to be used for metadata transformation.

## 7a. Create package

Initialize package. This may involve initialization of a compressed archive or creation of a folder structure.

## 8a. Add SKUs to package

Place the SKUs into the folders or into a compressed archive file.

## 9a. Check whether digital forensics are required for this SKU

Consult the distribution profile to see whether digital forensics are required.

## 10. Digital forensics required?

Decision node with two outcomes:  
1. "Yes" -- digital forensics are required, apply  
2. "No" -- digital forensics are not required.

## 11a. Take fingerprints

Apply the digital fingerprinting algorithm to the asset.

## 12a. Store fingerprints

Store the computed fingerprints in a data store for future reference.

## 13. Check whether there are more SKUs

If more SKUs to package, loop back.

## 14. Check for more SKUs

Decision node with two outcomes:  
1. "Yes" -- more SKUs are still left to package  
2. "No" -- no more SKUs are left, proceed to metadata transformation

## 15. Apply data map to metadata

Transform the DDC metadata format into the distribution partner format, using the data map provided.

## 16. Add metadata to package

Add the retrieved metadata file to package or place it in the folder structure.

## 17. Close package

Finish writing the package to disk. Do nothing if package is a folder.

## 18. Encryption required?

Decision node with two outcomes:

1. "Yes" -- the SKUs are present, proceed.

2. "No" -- the SKUs are missing, notify and end.

## 20. Fetch distribution partner's encryption key

Content to be distributed can be encrypted either with the partner's public key or with a previously established symmetric key. This fetches the key to be used for content encryption.

## 21. Encrypt package

Encrypt the newly created package using the previously fetched keys.

# Preconditions

1. The SKUs have been retrieved and decrypted.  
2. Metadata is available.  
3. Instructions for packaging are available.

# Postconditions

A newly created package.