

XMPilot Planner

User's Guide

Installation and Operation

Sony Corporation

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1 Overview

This document describes the Sony XMPilot Planner website and web service.

1.1 XMPilot Workflow System

The XMPilot Workflow system is based upon an XDCAM device's support for Planning Metadata. Planning Metadata is an XML schema that enables recording plan information to be defined in advance and stored as general metadata with clips.

A Planning Metadata file is used to describe an in-field production 'assignment'. The camcorder reads the Planning Metadata file and incorporates the information with each clip that is recorded. For example, the camcorder sets the name of recorded clips according to the 'Title' element within the file. The Planning Metadata file can also hold new types of metadata for clips and the assignment.

Planning Metadata can also be used for other programmes, such as drama or sport. For example, a single Planning Metadata file could be used to hold the recording information of a single scene in a drama production, or an entire episode of a series.

The complete XMPilot system allows the operator to:

- Create Planning Metadata (via Planning Metadata Add-in for Microsoft Outlook or XMPilot Planner website).
- Send Planning Metadata to journalists (via e-mail or web service).
- Write Planning Metadata to a camcorder (via Wi-Fi or local connection).
- Record and set logging (metadata) remotely from a camcorder (via Wi-Fi).
- Display proxy video from a camcorder during and after recording (via Wi-Fi).
- Automatically ingest disc or card content, including any additional logging data, into the correct places based on Planning Metadata (after return to the office).

1.2 XMPilot Planner

The XMPilot Planner website creates shooting assignments based on Planning Metadata.

Planner also creates shot categories that can be used by the XMPilot Tool mobile application to assign a category to each clip. Shot categories allow the captured material to be ingested automatically into a defined folder structure on the post-production video server, together with the assignment metadata generated during the planning and acquisition phases.

Once Planning Metadata and shot categories have been defined in XMPilot Planner, the shot categories file is linked with the Planning Metadata file, and both can be transferred to a member of the production team, typically received on a smartphone. The Planning Metadata file alone can also be transferred directly to the camera, although this is not necessary when using a smartphone as part of the XMPilot workflow.

The main functions of XMPilot Planner are:

- Creation and editing of assignment Planning Metadata
- Creation and editing of Essence Mark labels for an assignment
- Creation and editing of shot categories structure for an assignment
- Transfer of assignments to a camcorder

2 Installation

This section describes the installation of the XMPilot Planner web application.

XMPilot Planner is a simple application to install, despite being a combination of a website and web service running on a web server.

After installing, web server is ran automatically.

2.1 System Requirements

Sony XMPilot Planner has the following system requirements:

- Microsoft Windows 7 SP1 32-bit or 64-bit

2.2 Installing

Run the SonyXMPilotPlannerSetup.exe installer, and then follow the on-screen instructions. No configuration is required after installation.

The following software is automatically installed if not present:

- Ultidev Web Server Pro
- Microsoft Runtime C++ Libraries (VS2008 SP1)

The installer adds a link on the desktop and in the start menu to the installed Planner website.

The recommend browser for using the website is Microsoft Internet Explorer Version 7 or later.

2.3 Uninstalling

To uninstall the application, use the normal Windows control panel “Programs and Features” utility. To uninstall XMPilot Planner, open the “Programs and Features” control panel, select “Sony XMPilot Planner”, and then click the [Uninstall] button.

3 Launching and Exiting

3.1 Launching XMPilot Planner

To start the Planner website, double click the “Sony XMPilot Planner Website” shortcut icon or select [All Programs] > [Sony Corporation] > [XMPilot Planner] > [Planner Website] in the Start menu. You can also bookmark the website, and then select the bookmark to launch XMPilot Planner.

To start the website manually within a web browser, enter the URL "http://localhost/XMPilotPlanner".

Note that a delay of several seconds may be required to initialise .NET and related components.

To access the website from another machine, enter the URL “http://<IPADDR>/XMPilotPlanner”, where <IPADDR> is the IP address of the installation machine on the relevant network (e.g. Wi-Fi).

For details about accessing the planning information from a mobile application, see page 29.

3.2 Exiting XMPilot Planner

To exit XMPilot Planner, select Exit from the web browser's File menu, or click its Close button [X].

4 Name and Function of Parts

4.1 Assignments Screen

The Assignments screen is the main screen which appears when the website is loaded. It displays a list of assignments. You display the Assignments screen by clicking the [View Assignments] button in the Workflow pane.



1. Workflow buttons

View Assignments: Displays the Assignments screen.

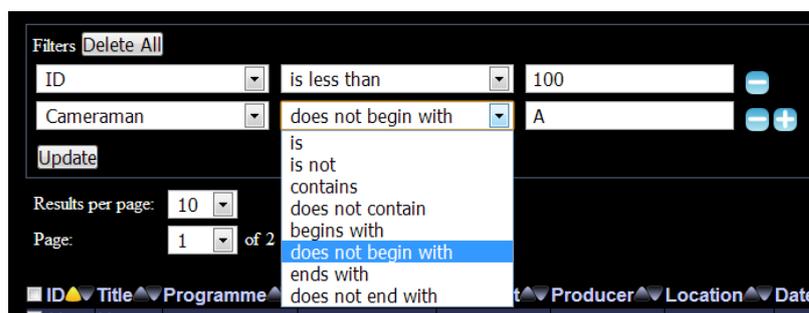
Create Assignment: Displays the Create Assignment screen.

Essence Marks: Displays the Essence Mark set list on the Configure Essence Mark Set screen.

The Workflow buttons are common to all screens.

2. Filters

Creates filters used for searching values in metadata fields within assignments.



Add button: Adds the first search filter. Up to 5 search filters can be added.

Column drop-down menu: Adds a metadata field to a search condition.

Comparison drop-down menu: Adds a Boolean search comparison to a search condition.

Value text box: Specifies a value for the metadata field in a search condition.

Delete All button: Deletes all search filters.

Update button: Validates the search condition value entries. If validation is successful, it displays the assignments that match all search conditions.

3. Page display

Displays the assignment list split into a set of pages.

Results per page drop-down menu: Specifies the number of assignments displayed per page (10, 20, **50**, 100).

Page drop-down menu: Displays the current page number out of the total number of pages. Select a page from the drop-down menu to change pages.

4. Assignment list

Displays the currently defined assignments in a table with Planning Metadata fields as the column headers.

The ID number is a unique incrementing number generated by the database. It is not used in Planning Metadata.

The list can be sorted, for the selected metadata field, in ascending or descending order. Clicking a column header first sorts the list in ascending order. Clicking a second time sorts the list in descending order. The sort order is indicated by the highlighted yellow triangle beside the column header.

5. Delete Selected button

Deletes the assignments that have a check mark in the corresponding check box (far left). Clicking the checkbox beside the ID column header selects/deselects all checkboxes.

4.2 Create Assignment Screen

The Create Assignment screen is used to create a new assignment based on Planning Metadata. You display the Create Assignment screen by clicking the [Create Assignment] button in the Workflow pane.

XMPilot Planner	
Create Assignment:	
Title	<input type="text"/>
Programme	<input type="text"/>
Cameraman	<input type="text"/>
Assistant	<input type="text"/>
Producer	<input type="text"/>
Location	<input type="text"/>
Date	<input type="text"/>
Notes	<input type="text"/>
Essence Marks	(none) <input type="button" value="v"/>
<input type="button" value="Create"/> <input type="button" value="Cancel"/>	

1. Metadata fields

Specifies the values for each metadata field in the Planning Metadata for a new assignment. Each new assignment is stored in the Planner database with an ascending, unique ID number.

2. Create button

Validates the values entered for the metadata fields. If validation is successful, the Assignment Details screen appears.

Note: The assignment information is created in memory, but not saved in the database until the [Create] button is clicked.

3. Cancel button

Cancels the operation, and returns the display to the Assignments screen.

4.3 Assignment Details Screen

The Assignment Details screen is used to edit the assignment metadata values, edit shot categories for an assignment, and send an assignment directly to a camcorder.

You display the Assignment Details screen by clicking the [Title] element of an existing assignment on the Assignments screen. It is also displayed when you click the [Create] button when creating an assignment on the Create Assignment screen.

XMPilot Planner

Workflow

View Assignments

Create Assignment

Essence Marks

Assignment Details:

Title	Foxes
Programme	Country Watch
Cameraman	John Smith
Assistant	Adam Johnson
Producer	Colin Amstel
Location	Berkshire
Date	11/08/2011
Notes	
Essence Marks	Drama

Save

Delete

Send Assignment to Camcorder:

Camcorder Address:	192.168.1.25
Username:	admin
Password:	

Next

[Download Assignment](#)

[Edit Shot Categories](#)

[Back to Assignments List](#)

1. Assignment Details

Metadata fields: Specifies the values for each metadata field in the Planning Metadata for an existing assignment.

Save button: Validates the values entered for the metadata fields. If validation is successful, it saves the assignment changes in the database.

Delete button: Deletes the assignment from the database. Note that the assignment is deleted without confirmation.

2. Send Assignment to Camcorder

Sends the Planning Metadata file created in XMPilot Planner directly to a camcorder on the same local network as the client PC.

Camcorder Address: Specifies the IP address of the camcorder.

Username: Specifies the login user name of the camcorder.

Password: Specifies the login password of the camcorder.

3. Download Assignment link

Exports the Planning Metadata for the currently selected assignment as an XML file. A [File Download] dialog appears for specifying a save destination or opening the file in a browser window.

4. Edit Shot Categories link

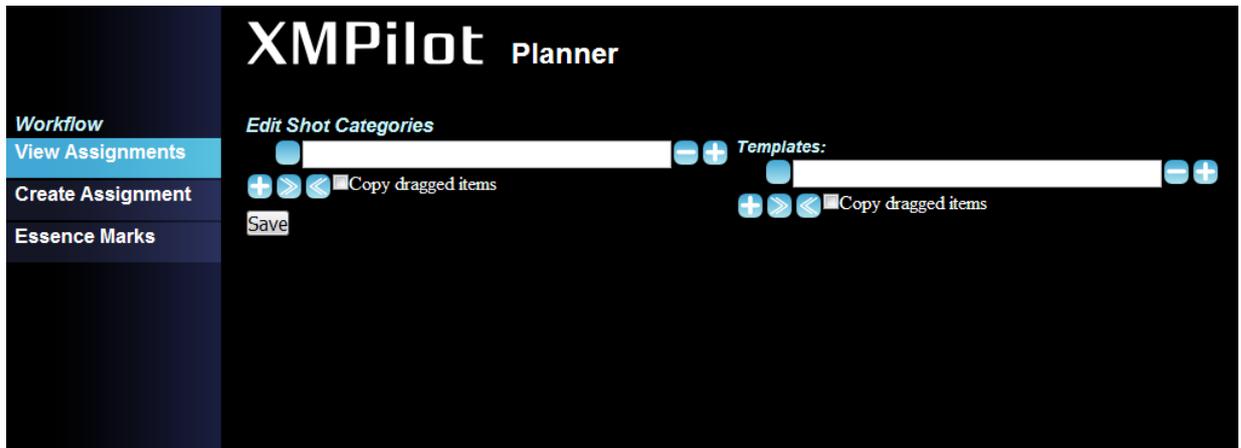
Displays the Edit Shot Categories screen for the currently selected assignment.

5. Back to Assignments List link

Displays the Assignments screen. Changes that are not saved will be lost. This link has the same function as the [View Assignments] in the Workflow pane.

4.4 Edit Shot Categories Screen

The Edit Shot Categories screen is used to create and edit shot categories for each assignment. You can also create shot categories templates that can be copied when editing shot categories for other similar assignments. You display the Edit Shot Categories screen by clicking the [Edit Shot Categories] link at the bottom of the Assignment Details screen for the selected assignment.



1. Shot Categories structure

Specifies the hierarchical structure of shot categories within an assignment (left structure) or within the templates (right structure).

Shot category text box: Specifies a text label for the clip category.

Drag button (square icon to the left of the text box) : Moves or copies the structure when dragging from one drag button in a structure to another drag button in another location within a structure.

[-] button: Deletes the corresponding item and all child items from the structure.

[+] button (right of item): Adds a child item to the corresponding item in the structure.

[+] button (bottom left): Adds a top-level item to the structure.

[>>] button: Expands the structure to display all items.

[<<] button: Collapses the structure to display top-level items only.

Copy dragged items checkbox: Selects copy, instead of move, when dragging and dropping items within a structure. Pressing and holding the Ctrl key on the keyboard has the same functionality. Note that items are always copied when dragging between the assignment structure and the templates structure, regardless of the setting of this checkbox.

2. Save button

Saves the assignment structure (left side) with the assignment, and any changes made to the Templates structure.

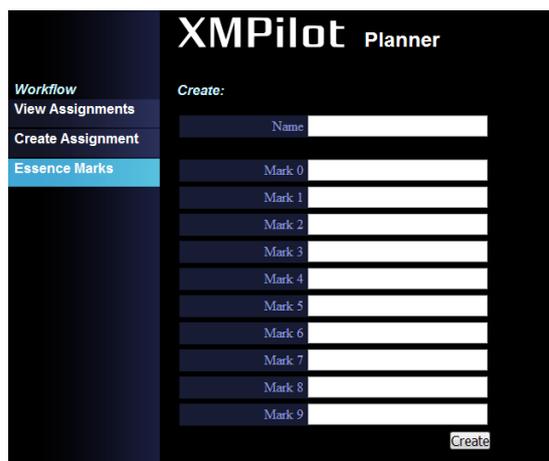
4.5 Configure Essence Mark Sets Screen

The Configure Essence Marks Sets screen is used to create, edit, and delete Essence Mark sets. An Essence Mark set is optional. You display the Configure Essence Mark Sets screen by clicking the [Essence Marks] button in the Workflow pane.



1. Create New Essence Mark Set

Displays the following screen for creating an Essence Mark set.



2. Essence Mark Set list

Displays the Essence Mark sets currently defined in Planner.

Name: Displays the unique names of the Essence Mark sets.

Essence Marks: Displays the Essence Mark labels as a comma-delimited list.

The list can be sorted, by Name or Essence Marks, in ascending or descending order. Clicking a column header first sorts the list in ascending order. Clicking a second time sorts the list in descending order. The sort order is indicated by the highlighted yellow triangle beside the column header.

3. Delete Selected button

Deletes the Essence Mark sets that have a check mark in the corresponding check box (far left). Clicking the checkbox beside the Name column header selects/deselects all checkboxes.

5 Operating Description

5.1 XMPilot Planner Workflow

The basic workflow when using XMPilot Planner follows these steps:

- 1) [Optional] Create an Essence Mark set.
- 2) [Optional] Create shot categories templates.
- 3) Create an assignment (plan), optionally selecting an Essence Mark set.
- 4) [Optional] Create an assignment shot categories structure, optionally using shot categories templates.
- 5) Send the assignment to the camcorder, using one of the following methods:
 - Launch an XMPilot mobile application on a smartphone, read the assignments with Shot Category structure from the XMPilot web service, and send an assignment to the camcorder over a Wi-Fi network.
 - Connect the camcorder to the office network, and send directly using the HTTP 'POST' method.
 - Download the Planning Metadata file onto a media card and then insert it into the camcorder.

5.2 Assignments

An assignment is a production shooting plan described in a Planning Metadata file. It defines the metadata fields and Essence Mark labels that are sent to a camcorder. The camcorder reads the Planning Metadata file and adds information about each clip subsequently recorded to the Planning Metadata file.

5.2.1 Creating an assignment



The screenshot shows the 'XMPilot Planner' interface. On the left is a dark sidebar with a 'Workflow' section containing buttons for 'View Assignments', 'Create Assignment' (highlighted in light blue), and 'Essence Marks'. The main area is titled 'Create Assignment:' and contains a form with the following fields: 'Title', 'Programme', 'Cameraman', 'Assistant', 'Producer', 'Location', 'Date', 'Notes', and 'Essence Marks' (a dropdown menu currently showing '(none)'). At the bottom right of the form are 'Create' and 'Cancel' buttons.

1. Click the [Create Assignment] button in the Workflow pane.
The Create Assignment screen appears.
2. Enter a title (required) and other metadata values (optional) as desired.
 - You can enter a Title of up to 50 characters (50 bytes in UTF-8 using multi-byte characters). Professional Discs use 50 characters (max), and SxS memory devices truncate to 44 characters (max). The following characters are invalid: [\ /] [:] [*] [?] ["] [<] [>] []].
 - You can enter up to 128 characters (128 bytes in UTF-8 using multi-byte characters) for other text fields.
 - The Date setting, if entered, must have the same format as the web server's current locale. You can enter a partial date (year and month); the start of the month is assumed.
 - You can enter up to 2048 characters (2048 bytes in UTF-8 using multi-byte characters) for the Notes field.
 - You can select a previously defined Essence Mark set from the drop-down menu or (none).
3. Click the [Create] button.
The entered metadata values are validated. If validation is successful, the Assignment Details screen appears.(see section 4.3)
4. Check that the entered information is correct, and click the [Save] button.
The assignment is added to the database.
Before saving, you can create a shot categories structure for the assignment. See section 5.4.1 "Creating and Editing Shot Categories" for details.

- Click the [View Assignments] button in the Workflow pane or the [Back to Assignments List] link at the bottom of the screen to display the assignment on the Assignments screen.

5.2.2 Searching assignments using filters



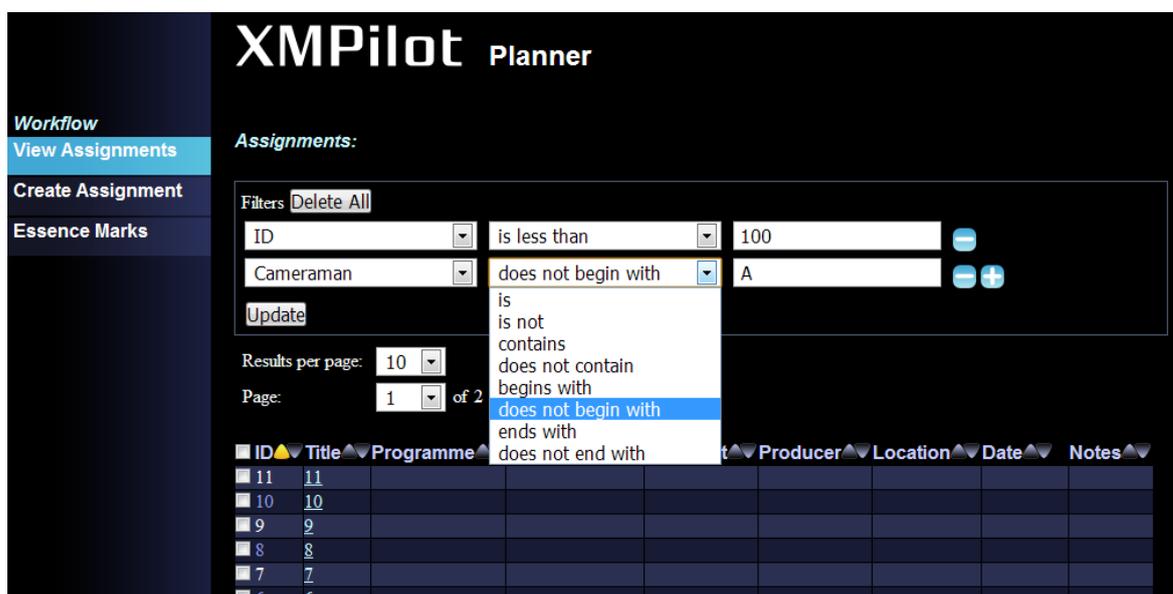
- Click the [View Assignments] button in the Workflow pane. The Assignments screen appears.
- Click the [Add] button in the Filters block to add the first search filter.

The first filter is:

<Column>: ID <Comparison>: is <Value>: empty

You can add up to 5 filters using the [+] button after the last filter in the list.

You can delete a filter using the [-] button to the right of the filter, or delete all filters using the [Delete All] button.



3. Select a metadata field from the <Column> drop-down menu.
In addition to the metadata field options, you can select [Any], which searches all fields (excluding numeric and date fields), [Created] or [Last Updated].
4. Select the search conditions from the <Comparison> drop-down menu.
The options displayed vary depending on the type of metadata field selected in step 3.

Search condition	Valid types	Matches
'is'	Text, Date, Numeric	Exact match only. Full dates only allowed. Text match is <u>not</u> case sensitive.
'is not'	Text, Date, Numeric	Reverse of above.
'contains'	Text	Text includes the <value> anywhere within it (<u>not</u> case sensitive).
'does not contain'	Text	Reverse of above.
'begins with'	Text	Text begins with <value> (<u>not</u> case sensitive).
'does not begin with'	Text	Reverse of above.
'ends with'	Text	Text ends with <value> (<u>not</u> case sensitive).
'does not end with'	Text	Reverse of above
'less than' / 'earlier than'	Date Numeric	Property less/earlier than <value>. Partial dates allowed.
'greater than' / 'later than'	Date Numeric	Property more/later than <value>. Partial dates allowed.

5. Enter a search value in the <Value> drop-down menu.
 - Date values should be entered in the same format as displayed in date columns (according to the web server's locale setting). However, other unambiguous date values are also supported (e.g. 21/6/2009, 21 June 2009, June 2009).
 - You can leave the value blank for "is" and "is not" search conditions to search for assignments where no value was entered for the field.
6. Click the [Update] button.
The values entered for the search conditions are validated, and any errors are displayed. When validation is successful, only the assignments that match all search conditions are displayed (logical AND search) in the Assignments list.

5.2.3 Editing an assignment

XMPilot Planner

Workflow

- View Assignments
- Create Assignment
- Essence Marks

Assignment Details:

Title	Foxes
Programme	Country Watch
Cameraman	John Smith
Assistant	Adam Johnson
Producer	Colin Amstel
Location	Berkshire
Date	11/08/2011
Notes	
Essence Marks	Drama

Save
Delete

Send Assignment to Camcorder:

Camcorder Address:	192.168.1.25
Username:	admin
Password:	

Next

[Download Assignment](#)
[Edit Shot Categories](#)
[Back to Assignments List](#)

1. Click the [Title] field in an assignment on the Assignments screen.
The Assignment Details screen appears.
2. Edit the metadata fields as required.
The same restrictions apply to the entered values as when creating assignments.
See section 5.2.1 “Creating an Assignment” for details.
3. Click the [Save] button.
4. Click the [View Assignments] button in the Workflow pane or the [Back to Assignments List] link at the bottom of the screen to display the Assignments screen.

5.2.4 Deleting assignments

To delete an assignment from the Assignment Details screen:

1. Click the [Title] field in an assignment on the Assignments screen to display the Assignment Details screen, if not open already.
2. Click the [Delete] button.
The assignment is deleted, without confirmation, and the display returns to the Assignments screen.

To delete assignments from the Assignment screen:

1. Click the [View Assignments] button in the Workflow pane to display the Assignments screen, if not open already.
2. Click the checkboxes for the assignments you wish to delete.
You can click the checkbox beside the "ID" column title to select/deselect all checkboxes.
3. Click the [Delete Selected] button to delete the selected assignments.
A confirmation dialog appears.
4. Click the [OK] button to confirm deletion.
The selected assignments are deleted, and the list is updated.

5.2.5 Sending an assignment to a camcorder

XMPilot Planner

Workflow
View Assignments
Create Assignment
Essence Marks

Assignment Details:

Title	Foxes
Programme	Country Watch
Cameraman	John Smith
Assistant	Adam Johnson
Producer	Colin Amstel
Location	Berkshire
Date	11/08/2011
Notes	
Essence Marks	Drama

Save
Delete

Send Assignment to Camcorder:

Camcorder Address:	192.168.1.25
Username:	admin
Password:	

Next

[Download Assignment](#)
[Edit Shot Categories](#)
[Back to Assignments List](#)

1. Connect the camcorder to the same local network as the client PC.
2. Click the [Title] field in an assignment on the Assignments screen to display the Assignment Details screen, if not open already.
3. Enter the IP address of the camcorder.
The default IP address for Sony camcorders is **192.168.1.10**.

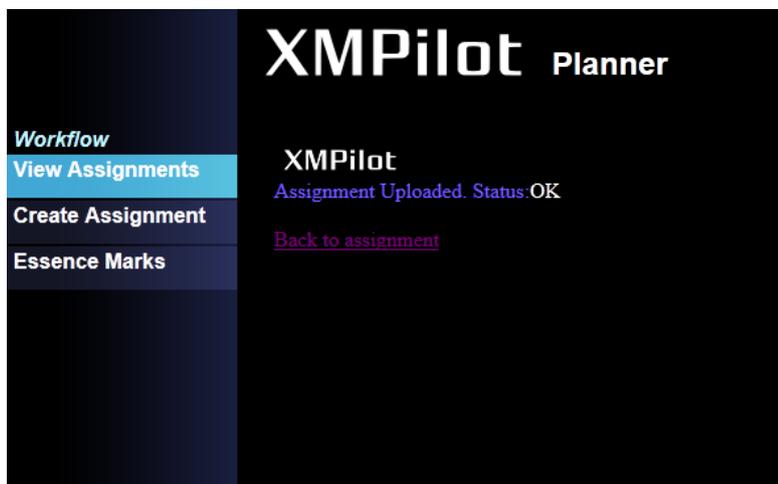
4. Enter the camcorder's user name and password.
A camcorder's default user name is **admin**, and the default password is the same as the camcorder model number (e.g. **pdw-700**).

Note that it is necessary to enter the password into the website each time.

5. Click the [Next] button.
The Upload page appears.



6. Click the [Upload] button.
The Planning Metadata is uploaded to the camcorder. If the camcorder is connected to the specified IP address and the upload is successful, the following screen appears. If unsuccessful, an error is displayed.



Note: If user or password is incorrect, "NG: Invalid Metadata" is displayed on Status value.

5.2.6 Downloading an assignment as an XML file

You can download Planning Metadata file for the assignment as an XML file, and then send the file a journalist or camera operator for use with the XMPilot Tool mobile application. Or the file can be saved onto memory disc or card and inserted directly into the camcorder.

1. Click the [Title] field in an assignment on the Assignments screen to display the Assignment Details screen, if not open already.

2. Click the [Download Assignment] link at the bottom of the screen.
The Planning Metadata is generated as an XML file, and a [File Download] dialog appears.
3. Click the [Open] button to display the Planning Metadata file, or the [Save] button to save the resulting file.

5.2.7 Customizing metadata fields for an assignment

You can add metadata fields and modify the names of metadata fields in assignments by editing the metadata configuration files using a text editor. The metadata fields are configured in the following four xml files in the “Program Files/Sony/XMPilot Planner/Website/Configuration/FormConfigurations” directory.

- AssignmentDetails.xml
- AssignmentDetailsEdit.xml
- AssignmentTable.xml
- CreateAssignment.xml

The default metadata fields are Programme, Cameraman, Assistant, Producer, and Location. For example, the Programme metadata field is defined in the AssignmentDetails.xml file, as shown below.

```
<PlanningMetadataFormField>
  <FieldType>meta</FieldType>
  <ID>Programme</ID>
  <Text>Programme</Text>
  <Editor>label</Editor>
  <ColumnWidth>150</ColumnWidth>
  <DataType>Text</DataType>
</PlanningMetadataFormField>
```

ID: Specifies the tag name used in the Planning Metadata file.

Text: Specifies text label displayed on the Planner web page.

To change the metadata field display name, modify the “Text” value in each of the xml files.

To change the metadata field ID and display name, modify the “ID” and “Text” values in each of the xml files.

To add a new metadata field, copy and paste an existing PlanningMetadataFormField element and then modify the “ID” and “Text” values in each of the xml files.

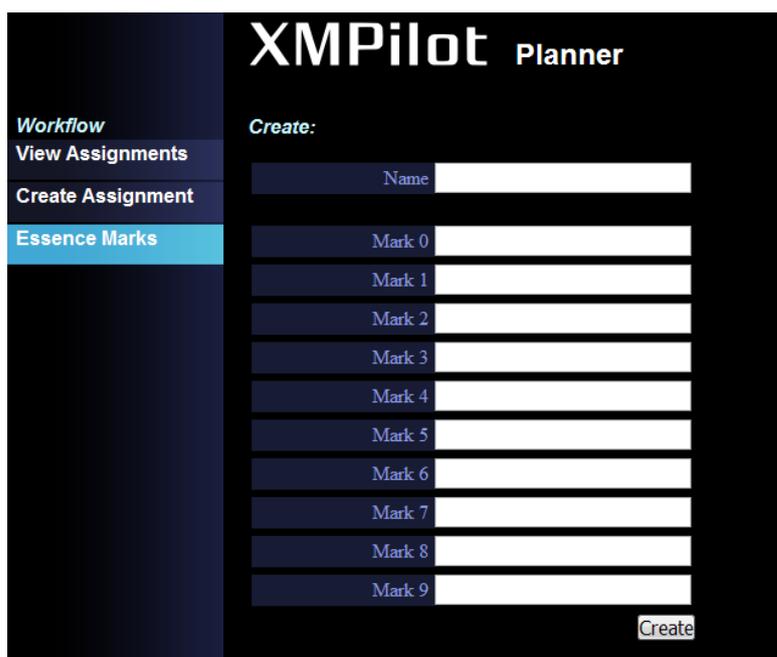
5.3 Essence Mark Sets

Planning Metadata supports up to 10 shot mark labels (coded using 'meta' elements) that can be assigned to clips when adding Essence Marks. The first two labels can be assigned to the assignable buttons on a camcorder to easily add Essence Marks with the corresponding label during recording. The other eight labels can be used to add Essence Marks using the camcorder's optional USB keyboard. The inclusion of an Essence Mark label set in an assignment is optional.

5.3.1 Creating an Essence Mark set



1. Click the [Essence Marks] button in the Workflow pane. The Configure Essence Mark Sets screen appears.
2. Click the [Create new Essence Mark Set] link. The following screen appears.



3. Enter a name (required) for the Essence Mark set, and then a value for each Essence Mark you wish to define.

- The name must be unique within the sets currently defined.
 - You can enter a name of up to 128 characters.
 - At least one mark label must have a value.
 - You can enter mark labels of up to 32 characters (32 bytes in UTF-16 using multi-byte characters).
 - You can leave some mark labels blank (e.g. define values for marks 1 and 3 only).
4. Click the [Create] button.

The Essence Mark set is validated. If validation is successful, the Essence Mark set appears in the Essence Mark list.

5.3.2 Editing an Essence Mark set

1. Click the [Essence Marks] button in the Workflow pane to display the Configure Essence Mark Sets screen, if not already open.
2. Click the [Name] field of an Essence Mark set.

The Edit Essence Mark Set screen appears.

Note: The Edit Essence Mark Set screen operation is the same as for the Create New Essence Mark Set screen. The same restrictions apply to the entered values as when creating an Essence Mark set. See section 5.3.1 “Creating an Essence Mark Set” for details.
3. Edit the Essence Mark labels as required.
4. Click the [Save] button.

The Essence Mark set is validated. If validation is successful, the Essence Mark set appears in the Essence Mark list.

Note: You can click a button in the Workflow pane or the Back button in the browser window at any time to cancel without saving.

5.3.3 Deleting Essence Mark sets

1. Click the [Essence Marks] button in the Workflow pane to display the Configure Essence Mark Set screen, if not open already.
2. Click the checkboxes for the Essence Mark sets you wish to delete.

You can click the checkbox beside the “Name” column title to select/deselect all checkboxes.
3. Click the [Delete Selected] button to delete the selected Essence Mark sets.

The selected Essence Mark sets are deleted, without confirmation.

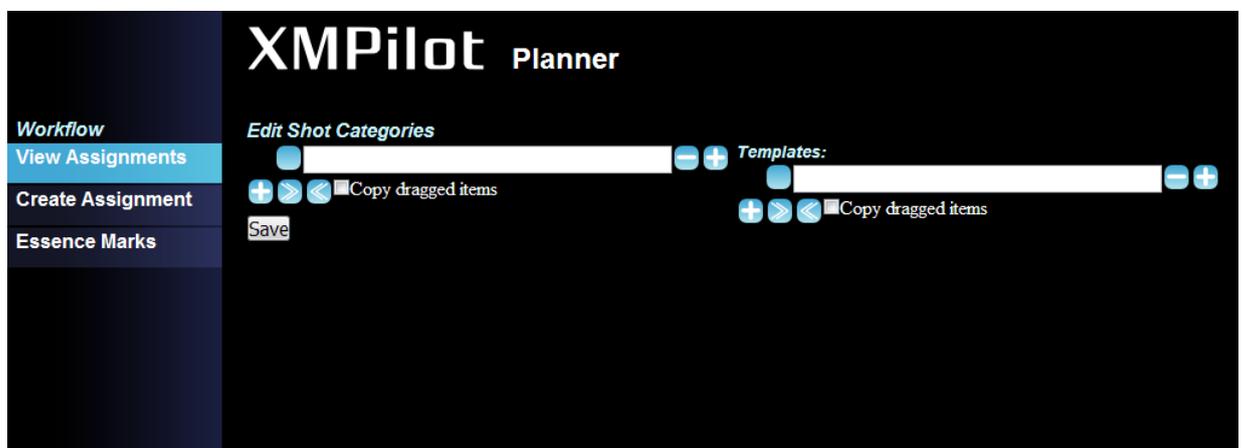
5.4 Shot Categories

In addition to the Assignment used by both the camera and the mobile application, the user can also define a flexible list of *shot categories* (clip categories), which is contained in a separate XML file and used only within the mobile application. A shot categories list provides a hierarchical structure from which the user can select a category (a path from the top level in the structure) that can be assigned to a clip during recording. The mobile application adds this information to the Planning Metadata file, storing a label along with the UMID of each recorded clip.

5.4.1 Creating and editing shot categories

You can create and edit shot categories for each assignment. You can also create shot categories templates that can be copied when editing shot categories for other similar assignments.

1. Click the [Title] field in an assignment on the Assignments screen.
The Assignment Details screen appears.
2. Click the [Edit Shot Categories] link at the bottom of the screen.
The Edit Shot Categories screen appears. The structure on the left side of the screen is the structure applied to the assignment. The structure on the right side contains template structures. Templates are not stored with each assignment.



3. Click the [+] buttons to add items and the [-] buttons to remove items from the assignment structure on the left side of the screen.
 - Clicking the [+] button on the bottom left of the structure adds another top-level item to the structure.
 - Clicking the [+] button to the right of an item in the structure adds a child item within that level in the structure.
 - Clicking the [-] button to the right of an item in the structure deletes that item and all sub-levels contained within it.

- Clicking the [>>] button expands all items in the structure. Clicking the [<<] collapses all items within the structure, displaying only top-level items.
 - You can create another item at the same level in the structure by inserting the cursor in an item and pressing Enter on the keyboard.
 - You can move items within the structure by dragging the “Drag” button to the left of an item to a different location in the same structure. You can copy items within the structure by clicking the [Copy dragged items] checkbox or holding down the Ctrl key, and dragging the “Drag” button to a different location in the same structure. The target location for drag or copy is indicated by a plus sign or a triangle. Releasing the mouse on a plus sign adds the structure within the target level. Releasing the mouse on a triangle adds the structure before the target level.
4. Enter text labels for each level in the structure.
You can enter text up to 100 bytes for each label.
 5. Click the [Save] button.
The shot categories structure collapses to display only the top-level items in the structure, and it is saved with the assignment.

Note: You can click a button in the Workflow pane or the Back button in the browser window at any time to cancel without saving.

5.4.2 Using templates

You can create shot categories and copy them from the assignment Shot Category structure into the templates structure, and vice versa. You can also copy parts of a structure. This is useful for creating similar structures repeatedly. Template structures are stored within XMPilot Planner, not within assignments.

Creation and editing of the Shot Category structure and Templates structure is identical.

Note: Items that are dragged between structures are always copied, not moved.

6 Integration with Workflow Tools

6.1 Integration with Mobile Applications

In addition to a website, the XMPilot Planner installer also adds a web service. The web service is used to manage the set of assignments, and allows the assignments to be read by the XMPilot Tool mobile application.

The mobile application, designed to run on smartphones, can be used to perform a number of tasks to support the XMPilot workflow during content acquisition.

- Receive Planning Metadata and shot categories from the XMPilot Planning website using a web services interface
- Receive Planning Metadata via an e-mail attachment
- Transfer Planning Metadata to an XDCAM camera over a Wi-Fi connection
- Create additional metadata during shooting (Essence Marks, shot categories, comments)
- View live video stream from the camera over a Wi-Fi connection

The primary function of the mobile application is to assign a shot category to each recorded clip, using the shot categories created on the XMPilot Planner website. This metadata is key to the automatic ingest process later in the production workflow.

The following mobile applications are supported:

- XMPilot Tool for Android devices (Android v2.3 and later), from Sony Ericsson Mobile Communications (SEMC)
- XMPilot Tool for iOS devices (iPad, iPhone, iPod Touch; iOS 4.2 and later), from Sony Corporation.

6.1.1 Logging in from a mobile application

To log in and receive Planning Metadata assignments from the XMPilot Planner web service, enter the host URL address of the web-service, a user name and a password.

The XMPilot Planner web service URL is:

<http://<IPADDR>/XMPilotService/XMPilotS.asmx>

where <IPADDR> is the IP address of the installation machine on the relevant network (i.e. Wi-Fi).

Depending on the mobile application, this URL information may be split into host address (the IP address of the installation machine) and relative location (relative address “/XMPilotService/XMPilotS.asmx”) on the installation machine.

Note: XMPilot Planner does not currently support multiple user accounts. The user name and password entries are ignored, and all assignments will be received.

6.2 Integration with Ingest Applications

6.2.1 Ingest to Avid NLE

The Sony XDCAM AMA Plug-in (PDZK-MA2) Ver1.2 supports Planning Metadata. Each metadata value within the Planning Metadata can be displayed as an Avid NLE bin column.

6.2.2 Ingest to Apple FCP

The Sony XMPilot Import Utility for Apple Final Cut Pro uses PDZK-P1 XDCAM Transfer to ingest into FCP using Planning Metadata with shot category information. It creates an FCP project or bin using a directory structure based on the shot category path for each clip.

Note: Requires FCP version 7.x.

7 Appendix

7.1 Troubleshooting

The following table gives some hints on troubleshooting potential issues with the machine or network configuration:

Issue	Cause and Solution
Cannot open website or access web service on the installation machine.	<p>Allow several seconds for the web site to appear or for the browser to return an error.</p> <p>Make sure the internet proxy, if present, is set to allow local addresses (including the installation machine address) to pass.</p> <p>If another web server is present on the install machine (e.g. IIS), it may be configured to not share ports.</p>
Cannot use web service from mobile application.	<p>Networking must be enabled and working. Check that the correct Wi-Fi parameters have been set and that the correct Wi-Fi network has been joined.</p> <p>Check the web service URL:</p> <pre data-bbox="687 1160 1487 1227">http://<install machine IP address>/XMPilotService/XMPilotS.aspx</pre> <p>The installation machine's firewall must be configured to allow port 80 access to the installation machine. This is the default setting for the standard Windows Firewall upon installation, but other firewall software may be present.</p>
Cannot open website from other machines (access from the installation machine works OK).	<p>Networking must be enabled and working. Check that the machines can communicate with each other.</p> <p>Check the website URL:</p> <pre data-bbox="687 1570 1487 1637">http://<install machine IP address>/XMPilotPlanner</pre> <p>The installation machine's firewall must be configured to allow port 80 access to the installation machine. This is the default setting for the standard Windows Firewall upon installation, but other firewall software may be present.</p>

7.2 Open Source Software

The following software and licenses are applicable to the XMPilot Web Applications software:

1. MIT License
 - libxml2
2. Boost Software License Version 1.0
 - Boost
3. Open Source License
 - ICU (International Components for Unicode)

7.3 Licenses

7.3.1 MIT License (for libxml2)

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7.3.3 ICU License - ICU 1.8.1 and later

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