Technical workshop on the established Online Filing software – patent management system (PMS) gateway

EPO User Day – The Hague
Agenda Online Filing Technical Workshop

- Overview of P M S Gateway
- Implementation of the P M S Gateway, Certification
- Patent management System simulation
  - Hands-on training
Patent Management System Gateway
Online Filing client: PMS/Gateway interface

Applicant side

Receiving office side

PMS system

EOLF Gateway system

Webservice

EOLF server at the EPO
EPO Online Filing
V5 client / server architecture
PMS/Gateway

- Patent Management System (PMS)
  - Prepare the application in your own (PMS) system
  - File it on-line, without human interaction on the client
    - Validate, Import, Sign, Send
  - Retrieve the response
  - Delete the application

- 2 topics
  - Content of the application
  - Mechanism/protocol to communicate with the olf client
Content of the application

- Defined by the procedure that one wants to process
  - EP1001 to the EPO and other filing offices
  - PCT RO101 to the EPO
  - National Office specific procedures

- Independent of the way one transfers the information to the client
  - supported prior to V4:
    - import via GUI
    - import via CMD-line
  - supported since V4 (additionally):
    - PMS/Gateway interface (Webservice, CMD-line interface)

- Has to be compliant with the contents of applications as if drafted with the EPO Online Filing client
Content of the application

- When modifying or extending your PMS system to produce these files
  - Use the available EPO Online Filing client software and procedures to provide samples and examples

- How to produce the samples:
  - Form-fill in the EPO Online Filing client
  - Export the application to a WAD
  - Inspect the files produced
Content of the application (1/2)

Documentation:

- [www.epo.org](http://www.epo.org), Applying for a patent, Online Services, Online filing, Download documentation

- Importing Data into Online Filing, XML data structures for exchange with the EPO's Online Filing system. Applicable to OLF version 5 and higher
Content of the application (2/2)

- Procedures described:
  - Form EP(1001E2K) - Request for grant of a European patent (EPC 2000)
  - Form Euro-PCT(1200E2K) - Entry into the European phase (EPC 2000)
  - Form EP(1038E) - Subsequently filed documents
  - Form EP (Oppo) - EP Opposition Procedure
  - PCT/RO/101

- National procedures are defined and described by the National Offices themselves
PMS-Gateway interface

- Mechanism to communicate with the OLF client

- Documentation to date:
  - [www.epo.org](http://www.epo.org) -> Applying for a patent -> Online Services -> Online filing -> PMS Interface
  - [www.epo.org](http://www.epo.org) -> Applying for a patent -> Online Services -> Online filing -> Download software for filing with the EPO
  - Online Filing **V5 PMS development kit** for applicants and PMS providers, version 1.3 (includes documentation), 30-05-2011
PMS Development kit

The development kit consists of a set of files comprising

- documentation
- DTDs
- Web Service Definition Language (WSDL) describing the interface
- PMS Simulator and sources
  - Java source code when using MIME extensions
  - .NET source code and readme file when using MTOM extensions
- Support and additional information are provided via the dedicated "Patent Management System Integration" forum, www.epo.org. Users are invited to post requests for support and information. All questions and answers will be published on this forum. Support can also be obtained via e-mail from epoline2ndlevelsupport@epo.org, and all relevant information will also be published on the forum.
Online Filing client: PMS/Gateway interface – Status

GUI tool ("PMS Simulator")
Status of development

- PMS/Gateway interface was first included in V4 release of the client (September 2008),

- To allow PMS development to take place, a development kit is available

- The update V5SP3, 30/5/2011, includes:
  - the support for .NET
  - multithreading, handling multiple requests at the same time
  - improved performance, faster response
  - the ability to render the requests in PDF

- The most recent version is V5.11, it does not include additional features for the PMS interface. One issue was fixed (Application Id of imported PCTRO101)
PMS-Gateway interface

- Supports a number of actions
- Enables to initiate the filing from start till finish
- A minimal but sufficient set of actions will be implemented
- Management of the client is done via the GUI
- How to initiate the actions:
  - via a call to a Web Service, available distributed mode (server installation)
Online Filing Workflow – From start till finish
Preparing the application

Applicant
Input Request
Attach documents

Technical documents as PDF

PDF Converter (Amvuli)
Scan

Technical documents

Business Object XML
Request (Form) in XML (Annex F)

Wrap & Sign
eFiling
Digitally signed envelope

Online Filing Client

Online Filing Workflow – From start till finish
Preparing the application

Applicant
Input Request
Attach documents

Technical documents as PDF

PDF Converter (Amvuni)
Scan

Technical documents

Business Object XML
Request (Form) in XML (Annex F)

Wrap & Sign
eFiling
Digitally signed envelope

Online Filing Client

European Patent Office
Online Filing Workflow — From start till finish
Sending the application to the office

Applicant

Online Filing Client

-Digitally signed envelope

-Received eFiling

-SSL Tunnel

Online Filing Server

-Checked
-Stored in Data Base
-Receipt is generated

Receipt

SSL Tunnel

Send eFiling

Return receipt

Confirm receipt

- Proceed to backend

Retrieve receipt

Archive data
Online Filing client: PMS/Gateway interface — Workflow

GUI driven

- DRAFT
- READY TO SIGN
- READY TO SEND
- SENT
- Export
- Delete

PMS driven commands

- Validate
- Import
- Sign
- Send
- Export
- Remove

Additionally

- Information
Online Filing client: PMS/Gateway interface – Certification

- PMS/Gateway disabled by default
- Any PMS needs first to be certified by the EPO before filing to production
- Test applications for certification available from EPO
- EPO will check these test filings for completeness and correctness
- If done successfully, the PMS is certified for production usage
Legal statement (1/2)

Before enabling the PMS gateway interface to submit filings to production, you are required to obtain prior consent from the Patent Office to which you intend to file.

By enabling this feature you confirm that you or your PMS vendor has obtained this consent.
Legal statement (2/2)

- For details on obtaining prior consent:
  - If you are using a commercially available system, please consult your Patent Management software vendor.
  - If you are using custom made Patent Management software, either built in-house or specially commissioned, please contact the support desks of the Patent Offices to which you intend to file. For the EP F1001 procedure and for the PCT/RO101 procedure, we recommend that you contact the EPO support desk first.
  - If you are a Patent Management software vendor, please contact the support desks of the Patent Offices to which you target to support in your product. For the EP F1001 procedure and for the PCT/RO101 procedure, we recommend that you contact the EPO user desk first.

- Information can be found in www.epo.org ->
Obtaining approval of your PMS software for filing with the European Patent Office (1/2)

- Submit a number of applications in **demo mode**. Sample applications containing data for each relevant procedure are available. File all the sample applications for each procedure. Check that the PMS has responded as expected at your end.

- If the PMS has responded as expected at your end, send required information to the EPO's user desk team and state
  - which procedures you wish to file via the PMS in future, and
  - the details of the demo filings you have submitted (procedure, date and time) so that they can be checked by the EPO.
Obtaining approval of your PMS software for filing with the European Patent Office (2/2)

- Our technical support team will let you know whether the EPO received your filings without any problem.
  - If we are able to process your filings without any problems, we will send you a confirmation e-mail. This constitutes approval of your PMS software.
  - If there are any technical problems with any of your filings, we will endeavour to work with you to find a solution.
Questions and Answers
Hands-on exercises
Exercise #1: Validate and import

Validate and import an EP(1001E2K) application via the PMS gateway
a) Start Online Filing in Demo mode, log in as Administrator without password
b) Create new folder "PMS" in File Manager
c) Start the PMS Simulator (PMS Java Client) from Start menu
d) Choose "Validate" command in PMS Simulator
e) Attach \texttt{TUD\_Demo\_1001.zip} from Desktop
f) Click on "Send request" button in PMS Simulator
g) Choose "Import" command in PMS Simulator, set import status "ready to sign"
h) Choose "PMS" as destination folder and attach \texttt{TUD\_Demo\_1001.zip} again
i) Click on "Send request" button in PMS Simulator

What is the response from the Online Filing PMS gateway?
Exercise #1: Validate and import continued
Exercise #1: Validate and import continued

j) Extract `ep-request.xml` from the `TUD_Demo_1001.zip` file

k) Open with Notepad (right mouse click "Open with" - "Notepad")

l) Fix issue 1: validation_message severity="1" validation_ID="80" gui_tab="Request">Filing Office is mandatory

    Enter "EP" in <ep-request> tag between quotes at ro=""

m) Fix issue 2: validation_message severity="1" validation_ID="39"

    gui_tab="Names">natural_applicant_nationality

    Replace "YY" in <country> tag of <applicant> tag by "DE"

n) Save and close Notepad

o) Drag and drop `ep-request.xml` onto `TUD_Demo_1001.zip` file

p) Launch again "Validate" command in PMS Simulator

q) Launch "Import" command with import status "ready to sign", folder "PMS"

What is this time the response from the Online Filing PMS gateway?
Exercise #1: Validate and import continued
Exercise #2: Sign and send

Sign and send the imported EP(1001E2K) application via the PMS gateway

a) Open the sign_alpha.xml file in Notepad
b) Enter your name in the <name> and <text-string> tags, latter with slashes
c) Save and close Notepad
d) Launch "Information" command in PMS Simulator with folder "PMS"
e) Memorise application_ID of formerly imported EP(1001E2K) application
f) Choose "Sign" command in PMS Simulator, put smart card into reader
g) Enter memorised application_ID from above
h) Attach the sign_alpha.xml file in the "File with signature" field
i) Tick "final signature" checkbox and click on "Send request" button

What is the response from the Online Filing PMS gateway?
Exercise #2: Sign and send continued
Exercise #2: Sign and send continued

j) Clean the PMS Simulator's response pane (red button with white "x")
k) Choose "Send" command in PMS Simulator
l) Enter formerly memorised application_ID
m) Click on "Send request" button in PMS Simulator
n) Wait one minute
o) Launch "Information" command in PMS Simulator with folder "PMS"

What is the response from the Online Filing PMS gateway?
Exercise #2: Sign and send continued
Exercise #3: Export and remove

Export and remove the sent EP(1001E2K) application via the PMS gateway

a) Look application up in File Manager: application_ID also shown there
b) Choose "Remove" command in PMS Simulator
c) Enter memorised application_ID from above
d) Click on "Send request" button in PMS Simulator

What is the response from the Online Filing PMS gateway?
Exercise #3: Export and remove continued

The selected application has sent status, but was not exported yet. Please first export before removing.
Exercise #3: Export and remove continued

e) Choose "Export" command in PMS Simulator
f) Enter memorised application_ID from above
g) Click on "Send request" button in PMS Simulator
h) Open newly created ZIP file on your desktop (ZIP in ZIP file)

Is receipt.dat available there?

Choose again "Remove" command with memorised application_ID

i) Click on "Send request" button in PMS Simulator

What is this time the response from the Online Filing PMS gateway?
Exercise #3: Export and remove continued

PMS request / Online Filing gateway response

[27/05/09 17:06] Client request:
<xml version="1.0" encoding="UTF-8"?>
<PMS_2_OLF_input version="1.0" encoding="UTF-8"?>
<username>User_Name</username>
<password>Password</password>
<mode>demo</mode>
<language>en</language>
<remove/>
</PMS_2_OLF_input>

[27/05/09 17:06] Server response:
<xml version="1.0" encoding="UTF-8"?>
<DOCTYPE OLF_2_PMS_response SYSTEM "OLF_2_PMS_response.dtd">
<OLF_2_PMS_response mode="demo" language="en" result="success">
<return_value>
<error_code>-1</error_code>
<error_message>Removing has been completed successfully</error_message>
</return_value>
</OLF_2_PMS_response>
Exercise #4: Non-referenced file

Validate and import an EP(1038E) application via the PMS gateway

a) Clean again the PMS Simulator's response pane (red button with white "x")
b) Choose "Validate" command in PMS Simulator
c) Attach TUD_Demo_1038.zip from Desktop
d) Click on "Send request" button in PMS Simulator

What is the response from the Online Filing PMS gateway?
Exercise #4: Non-referenced file continued

Non-standard and non-referenced files found in the package: strange.xml

<return_values>
  <error_ID>2001002</error_ID>
  <error_message>Non-standard and non-referenced files found in the package: strange.xml</error_message>
</return_values>
Exercise #4: Non-referenced file continued

e) Open **TUD_Demo_1038.zip** in winzip (double-click on the ZIP file)
f) Delete the file **strange.xml** (hit the DEL key)
g) Close winzip
h) Launch again the "Validate" command

What is this time the response from the Online Filing PMS gateway?
Exercise #4: Non-referenced file continued
Thank you for your attention

www.epo.org