



# ***xPrintTalkLib***

***Version: 0.3***

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## **Abstract**

This document describes the structure and functionality of CIP4 xPrintTalkLib and how to use it. The library was written in Java and simplify dealing with PrintTalk messages. It provides methods for creation, modification and analyzing.

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## Developer Team

CIP4 thanks the developer team of 'xPrintTalkLib' and their organizations for the great work!

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# Chapter 1. Introduction

The major conceptual change in JDF 2.0 (or XJDF) is the technology does no longer attempts to model the entire job as one large "job ticket" but rather specifies an interchange format between two applications that are assumed to have an internal data model that is not necessarily based on JDF. Thus each JDF ticket specifies a single transaction between two parties. A single job may be modeled as one or more JDF transactions.

This fact also requires a conceptual change of JDF and PrintTalk libraries as well. Among other things the focus of 1.x libraries is dealing with large XML files (XML files were used as data storage), managing concurrency file access (spawn and merge) and handling the workflow logic (references). Further there even are implemented some very common XML functionalities like creating Java objects from XSD Schema and so on.

Remember, the fundamental concepts of JDF (and the library) were designed in the nineties. At this time XML was a very new technology and just a few early XML Tools already had existed. Further the XML technology itself was in a very early phase of development. So it was essential to include all this stuff mentioned getting JDF working.

Over the last two decades XML has become very popular. Many tools were designed and many conceptual enhancements in XML has been done. For example one significant enhancement has been XPath. More details about the XPath W3C Standard later in this document or on the W3C website: <http://www.w3.org/TR/xpath/>.

Due to the major change from JDF 1.x to JDF 2.0 a redesign of the JDF and PrintTalk libraries is strongly recommended. The new xJdf / xPrintTalk library now is based on commonly used libraries and technologies like the Apache or JAXB framework. Supplementary functionality which has been removed from JDF Specification no longer makes the library unnecessarily complex for reasons of backwards compatibility. The goal of xJdfLib is to provide a lightweight, up to date and easy to use library optimized for actual requirements. This document describes the concepts and the usage of the CIP4 xJdfLib.

## Chapter 2. The xPrintTalk Library

The CIP4 xPrintTalkLib Java Library is based on Java 7. The latest stable version is being published on the CIP4 Website on page “Technical Resources -> Downloads -> Internal Source”. Further xPrintTalkLib is an Apache Maven project. So the latest stable version also is available in the public Central Maven Repository:

```
<dependency>
  <groupId>org.cip4.lib.xprinttalk</groupId>
  <artifactId>xPrintTalkLib</artifactId>
  <version>0.3</version>
</dependency>
```

Early Next-Version-Snapshots of CIP4 xPrintTalkLib Library are being published in the public OSS Sonatype Snapshot Repository:

```
<repository>
  <id>SnapshotOSS</id>
  <name>OSS Snapshot</name>
  <url>https://oss.sonatype.org/content/repositories/snapshots/</url>
  <snapshots>
    <enabled>true</enabled>
  </snapshots>
</repository>
```

```
<dependency>
  <groupId>org.cip4.lib.xprinttalk</groupId>
  <artifactId>xPrintTalkLib</artifactId>
  <version>0.4-SNAPSHOT</version>
</dependency>
```

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## Chapter 3. Core Components

The concepts are equal to xJdfLib. So please check this documentation.