

Architecture

Prinerger uses PDF as the internal file format, tracks tasks with job tickets, and distributes tasks to job ticket processors.

PDF as the internal file format

The internal file format in Prinerger is PDF. This means that all input files of all file types are converted, or "normalized," into PDF digital masters for use in subsequent phases of the workflow.

PDF files:

- RIP reliably and predictably
Unlike Adobe PostScript files, PDF files do not have to be interpreted to ensure that all referenced resources, for example, fonts and images, are available. Thus, rasterizing—the second phase of RIPing that occurs just before output—is a straightforward and predictable process.
- Are independent of any platform, operating system, authoring software, and output device
- Are viewable in Microsoft Windows, Apple Mac OS, and The Open Group UNIX operating system software
- Are printable to output devices at high resolutions

Although Prinerger uses PDF internally, it uses many other file formats for input and output. For example:

- It accepts several file formats as input files, including PostScript, EPS (Encapsulated PostScript), and many others.
- It produces several file formats as output, including a variety of vector or raster formats.

For a list of supported file formats, see the *Prinerger Workshop User Guide*.

Job tickets

A job ticket is a collection of information relating to one task. It always includes an outline of processing steps that need to be performed. It may also include other information, such as the files to process, destinations, and so on.

Job tickets enable Prinerger to perform processing in the background without the need for user interaction.

Job tickets use the Portable Job Ticket Format (PJTF), a control mechanism for specifying the sequence of operations and parameters that are to be performed on PDF files. PJTF is part of Adobe Extreme technology, a high-end, production-printing architecture.

A job ticket takes its name from the Extreme technology practice of equating a job with a task. Except for the term job ticket, Prinerger documentation uses the standard prepress definition for a job—a related collection of customer files—not a task.

Job ticket processors (JTPs)

A job ticket processor (JTP) is a software process that performs a specific step to help process a job ticket.

Prinerger has a JTP for each possible kind of processing—for example, refine, output, and archive JTPs. Some processes, such as refine, require several JTPs strung together.

You can have multiple instances of the same type of JTP running on a server. For example, with multiple instances of the Normalizer JTP, you can process multiple jobs simultaneously. For further performance enhancement, you can distribute instances of the same type of JTP on different servers, and you can create JTP pools.

In Prinerger, a job ticket includes a map that specifies which JTPs to use and in what order.

CORBA communication

Prinerger uses Common Object Request Broker Architecture (CORBA) for some internal communications. CORBA allows software to communicate with one another, no matter where they are located or who designed them.

The Object Request Broker (ORB) is the middleware that brokers the communication between client and server software—for example, between Workshop and the various Prinerger daemon processes on the server.

Prinerger uses an implementation of CORBA by IONA Technology PLC called Orbacus and OrbacusWeb. It uses TCP/IP as the core networking protocol.

Not all communication in Prinerger relies on CORBA. Adobe Extreme does not use CORBA and has its own communication structure. However, Extreme still uses TCP/IP as the underlying protocol.