The *line data applet* is a Java applet that is provided by ODWEK. It is similar to the line data viewing capabilities of the Windows client, but it does not contain all of the parallel functionality for viewing line data within the Windows client. For example, the applet does not support saving and selecting custom views.

The *plug-ins* for *AFP* and *images* are shipped as setup packages, which must be installed on the user's computer. The plug-ins integrate themselves with Mozilla Firefox browsers and Microsoft Internet Explorer. The AFP plug-in provides similar viewing capabilities to the Windows client.

The image plug-in can view image files, with the added benefit of displaying TIFF images (which current web browsers usually cannot display).

Conversions and transforms

In addition to the viewers, ODWEK uses conversion or transformation engines, which convert the document into another data type. ODWEK allows the integration of AFP Transform components for converting AFP into HTML or PDF documents, and it provides a generic transform interface, which can be used to plug in any conversion or transformation engine.

The transforms apply only to documents that are served by ODWEK. They are available to web clients that are based on ODWEK (such as Content Navigator) and to any other application that is written by using the ODWEK Java API. They are not available on the Windows client.

Web viewing considerations

When you choose a viewer strategy in web clients, it is important to know the differences among the viewer architectures:

- ▶ Java applet viewers, such as the line data applet or Content Navigator's generic applet viewer, are downloaded automatically to the user's computer and run within the browser. No deployment is needed, but a Java installation must be present on the PC. They are effectively cached on the user computers, and they can provide sophisticated functionality. On the downside, each Java applet requires a Java virtual machine (JVM) to run. On terminal servers that serve multiple users at once, this requirement might lead to larger memory consumption.
- ▶ Plug-in viewers are native applications that must be installed through a setup routine on the user's computer. They integrate with the browser and provide their own viewing logic, which can be sophisticated (for example, with the AFP plug-in).
- ► The generic and Ajax viewers that are provided by Content Navigator provide limited rendering and viewing capabilities. They do not require any rollout or JVM.
- ► Transforms, such as the Ricoh AFP2PDF or other vendor-provided transforms, result in a PDF document that is viewed in the Acrobat viewer. Although this viewer is deployed on most user PCs, the rendering consumes processing power on the mid-tier system. Also, large documents cannot be rendered into PDFs. Because the PDF is displayed by an external application, it cannot communicate with the Content Manager OnDemand server like the line data applet.