



Distance Learning and Asymetrix Toolbook II

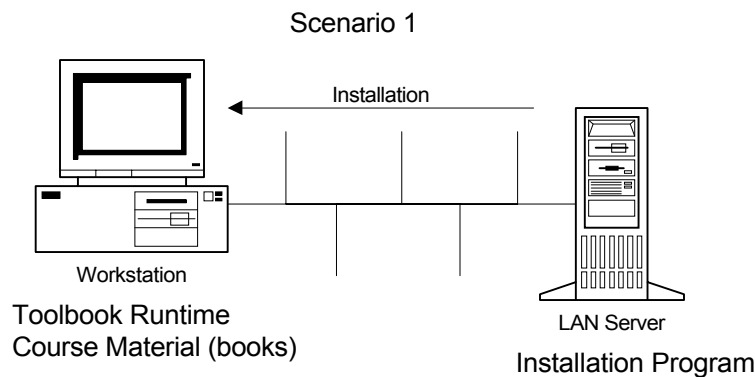
(The general principles apply to many authoring tools)

03/06/2001

The main scenarios of Distance Learning (CBT) and Toolbook are:

1. **Toolbook runtime and the course material (books) installed on each student's workstation.**
2. **Toolbook runtime installed on each student's workstation and the course material installed on a LAN server.**
3. **Intranet with each workstation directly connected to the intranet.**
4. **Internet with each workstation connected to a Web server via modem/ISDN.**

1. *Toolbook runtime and the course material (books) installed on each student's workstation.*



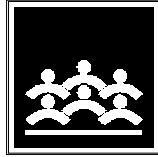
Requirements: Multimedia computer, 5 Mb disk space for runtime, at least 30 Mb for each small course.

Pros:

- Best multimedia response time.
- Can be installed on a stand-alone computer; no network required.
- No variable cost for network connection.
- No network load while student is taking the course.
- Can be installed via a network connection.

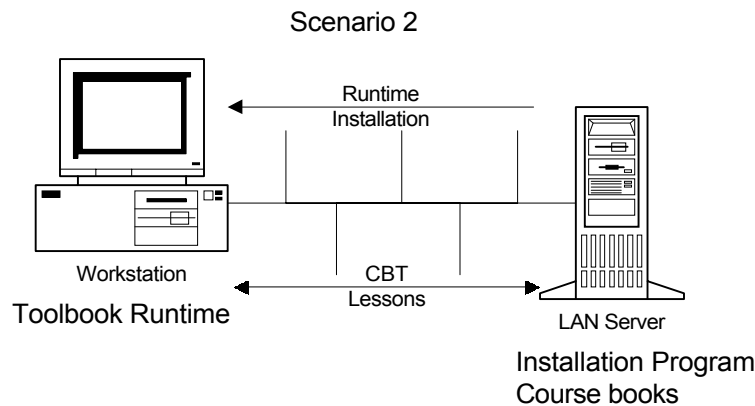
Cons:

- Requires large amount of workstation disk space (100 Mb+) for large course.



- Course must be manually updated on each workstation (distribution difficulty)
- Requires long installation for stand-alone system (tape or floppy disk).
- Each course must be installed, used, then uninstalled.

2. Toolbook runtime installed on each student's workstation and the course material installed on a LAN server.



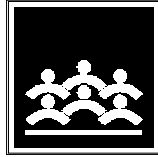
Requirements: Multimedia computer, 5 Mb disk space for runtime, at least 30 Mb on server for each small course.

Pros:

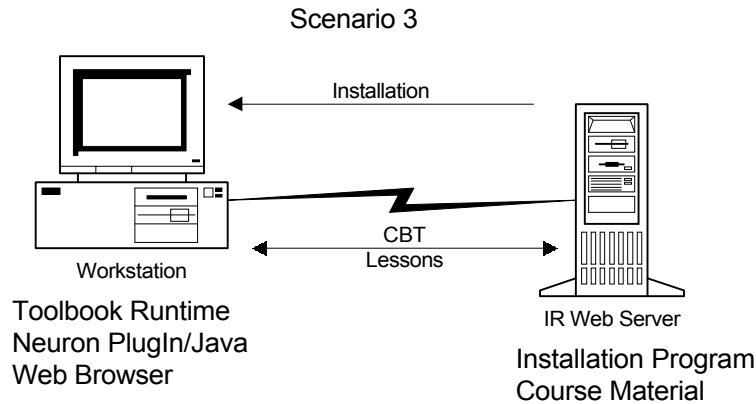
- Runtime can be installed via network connection.
- Course material takes up no workstation disk space.
- One-time runtime installation for unlimited number of courses.
- Courses can be added and updated at the server; user-transparent.
- Feedback to course administrator via SMTP on the server.

Cons:

- Higher network loading.
- Multimedia response time based on network speed and load.



3. ***Intranet with each workstation directly connected to the intranet.***



Requirements: Multimedia computer, 1-2 Mb disk space for runtime, at least 30 Mb on Web server for each small course.

Two options are available when running intranet/Internet:

1. Use "native" Toolbook authoring with scripting (most flexible for development). This uses the Asymetrix Neuron PlugIn to Netscape/IE for runtime.
2. Use special Internet Toolbook controls in authoring. Less flexible, but better optimized for TCP/IP use. Use Java classes for interaction.

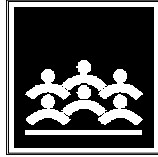
Neuron

Pros:

- Can single-source CBT development for stand-alone, server and intranet/Internet.
- Can use Toolbook scripting for flexibility.
- Neuron can be installed via network or intranet connection.
- Course material takes up no workstation disk space.
- One-time installation for unlimited number of courses.
- Courses can be added and updated at the Web server; user-transparent.
- Feedback to course administrator via SMTP on the server.

Cons:

- Full "native" Toolbook capabilities not available (no DLL links available).
- Network loading for multimedia elements.



- Multimedia response time based on network speed and load.

Java Classes

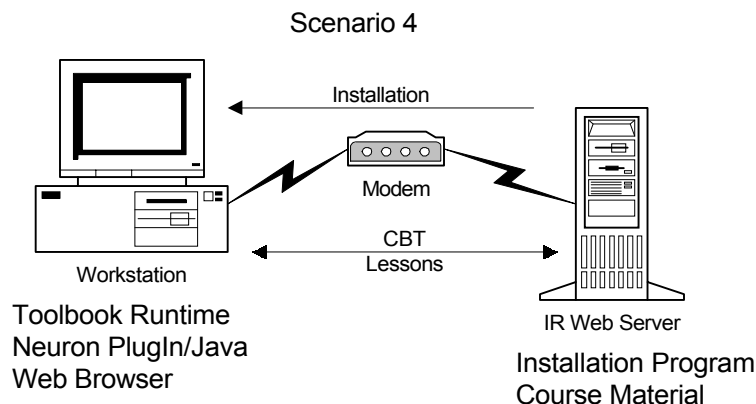
Pros:

- Probably better optimized for TCP/IP.
- Smaller workstation footprint for Java than for Neuron.
- Java classes can be installed via network or intranet connection.
- Course material takes up no workstation disk space.
- One-time installation for unlimited number of courses.
- Courses can be added and updated at the Web server; user-transparent.
- Feedback to course administrator via SMTP on the server.

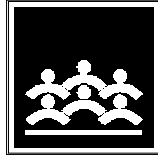
Cons:

- No Toolbook scripting or DLLs available (less flexible development)
- Network loading for multimedia elements.
- Multimedia response time based on network speed and load.
- Cannot single-source a network and Java course; each uses different controls.
- Workstation must have an intranet/Internet; cannot use a LAN connection.

4. *Internet with each workstation connected to a Web server via modem/ISDN.*



Requirements: Multimedia computer, 1-2 Mb disk space for runtime, at least 30 Mb on Web server for each small course.



Pros and cons are similar to Scenario 3, except that the connection is slower. More likely that the Java Class approach is more optimum.

Recommendation

While a company is developing its intranet, use the workstation/server development environment with design towards intranet usage. As the intranet matures and more users come online with Web browsers, use Neuron as the interface. Can still use same course book as stand-alone, LAN-server-based, or Web-server-based.