New Employee Technical Orientation Curriculum

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updated 3/15/01
Letter to the iTLG

Dear iTLG:

This curriculum guide is designed to provide you a resource for the design process and decisions made for NETO. The thought that went into this design took into consideration many factors. From analyzing the available resources and content to observing expert practices to determining instructional philosophies to the pedagogical theories that would be used to ground the learning to analyzing learning that occurs in your organization, we have arrived at a solution that meets these needs.

Included in this guide is an outline of our design process. Through this description, you will gain insight into how our decisions were made. You will also see how other network dependent technologies can be included in the future. As groups in other theaters develop their theater specific technical orientations, we hope that they will find this resource a useful guide.

Heidi, Jee and John
OVERVIEW

Rationale
New employees at Cisco Systems, Inc. must become rapidly familiar with specific technologies in order to be effective members of their teams. We propose the design of a web-based New Employee Technical Orientation (NETO) that will address this learning problem. In order to utilize the full potential of the technology new employees must first develop a mental model of Cisco’s network. New employees must also gain an understanding of how specific networked tools improve individual and group work efficiency.

The New Hire Technical Checklist and various multimedia tutorials already exist for various networked tools. The New Hire Technical Checklist helps new employees complete one-time only tasks. Should they need assistance in understanding how to use a specific technology, such as NetMeeting, they are directed to a multimedia tutorial, which is a movie that the learner watches.

The NETO will add value to the existing resources because it will teach new employees the strategic knowledge that experts use when they use core technology for teamwork. NETO will be a scenario-based, interactive learning experience, where the learner decides how he or she will solve a prototypical problem that they are likely to face while working at Cisco. Such scenarios may include archiving notes from a meeting in a folder on the NT server, scheduling meetings with other team members, and other such tasks that seasoned employees currently perform. The choices the learner makes as he or she solves the problem will elicit feedback from the system that will offer insight into his or her choices. Since experts have multiple ways of performing tasks given different contexts, any choice the learner makes will follow an expert path in a particular context. The learner will have choices in the quality and quantity of the feedback that is given. Once the learner arrives at his or her final answer, he or she will be given a self-assessment and also an opportunity to return to the training to work through other the same scenario or move onto others. This training will enable learners to navigate, practice, and assess as they wish. This is important because each learner is different and brings his or her own prior knowledge of the technology.

Context

Site Description
Cisco is one of the largest companies in the Internet networking industry, and its pool of employees steadily increases on a weekly basis. There are many types of new employees. Some employees have actually worked for Cisco as contractors and have converted their status to full-time employees. Other new employees come from companies that have been acquired by Cisco. Still others may have no prior experience with Cisco. Regardless of their circumstance, these employees must rapidly assimilate to their new jobs. In order to facilitate the assimilation of new employees into Cisco, the Human Resources department conducts a four-hour orientation session every Monday. The New Employee Orientation (NEO) provides the new employee with an overview about Cisco, including information about job benefits, security, culture, and the regularly used technology. Unsurprisingly, there are several tools that are essential for workflow and productivity at Cisco. This group of technology merits its own orientation, the New Employee Technical Orientation (NETO).

Cisco’s tag line states, “Changing the way we work, live, play, and learn,” and learning is definitely embedded in the culture. John Chambers, the CEO, realized that learning is imperative for Cisco’s success in the technology field and thus has made training a top priority for Cisco employees to go through. This can be related to a quote from Louis Ross, a Ford Motor Co., CTO:
In your career, knowledge is like milk. It has a shelf life stamped right on the carton. The shelf life of a degree in engineering is about 3 years. If you're not replacing everything you know by then, your career is going to turn sour fast. (iTLG Presentation)

Moreover, John Chambers believes that “education and the Internet are the two great equalizers” in life. This is the main reason why Cisco has invested millions of dollars in the development of eLearning and why there is a heavy push for employees to go through eLearning courses because they are convenient, and they save time and money.

**Available Resources: Current NETO, VoD, Multimedia Tutorials, TRC/ITS Library, New Hire Technical Checklist**

During the NEO, a thirty minute presentation about technology in the workplace is given by a member of the Information Technology Learning Group (iTLG). The content of the presentation is a broad overview of all of the technology used at Cisco. At this time, the new hires are also provided with a hard copy of technology reference manual. The presentation is designed to direct new hires to the NETO.

The current NETO offered is a Video on Demand (VoD), which serves as an introduction to the core technology employees use at Cisco. The VoD is accessible from the intranet and can be downloaded in video or audio-only forms. The VoD also offers a set of slides that can be downloaded. Additionally, the VoD allows the user to navigate through the video and select desired portions; it allows the user to follow a non-linear, user-controlled path. Another feature of the VoD is its link to the intranet. The URL’s it provides on the slides are live, and the user can access them immediately if desired. The VoD is consequently organized as a series of frequently asked questions (FAQs). Members of the Information Technology Learning Group (iTLG) ask and answer these questions in the VoD.

The VoD is not intended to be a thorough description of all items, but serves more as a survey of the most important technologies that a new employee will need to use as a part of his or her job. It points the viewer to appropriate URL’s or other resources that provide more detailed instruction or information as needed. Although the VoD provides a stable way to get information, producing a video is costly and is difficult to update. Furthermore, it offers little interaction and requires minimal action on the part of the user. Most importantly, the VoD delivers information instead of fostering knowledge of the information.

One of the resources that the VoD recommends is the TRC/ITS (Technical Response Center/Internal Technical Support) library. This library has detailed information about most of the technology used at Cisco. Its documents are generally text descriptions that are viewable on the intranet. Updating and maintaining these pages are huge tasks, especially in light of the rate at which technology changes. Moreover, the directions in the library are usually step-by-step processes, which provide a systematic way of solving the problem, but do not offer ways to learn how to prevent the problem from happening again.

Another resource available is the multimedia tutorial. Currently, there are several multimedia tutorials, including ones for *Eudora Pro*, a supported e-mail software package, and *Meeting Maker*, a scheduling groupware package. Both of these tutorials contain animations, sound, and video, but require little or no interaction by the user. They simply show the user the steps required to use the software, but do not outline the necessity or value of the software in the workplace or the importance of the individual employee’s role in the use of the software. In particular, *Meeting Maker* is groupware, which means that the success of the software is dependent on its use by all employees. This important fact, however, is never mentioned in the tutorial. Also, these tutorials are files created by *Macromedia Director*, which is a multimedia authoring tool, and are difficult and costly to edit and maintain.
Recently, another tool was created for new hires called the New Hire Technical Checklist (NHTC). The purpose of this resource is to instruct new hires on the high priority tasks they need to complete and to direct them to the multimedia trainings and other instructional internal websites to learn about specific programs, such as NetMeeting. The checklist is a tool that instructs new hires on linear processes. In examining all these available resources, it is apparent that they have not brought the greatest possible return on investment in helping employees understand the technologies they need to use and the context in which they use them.
CURRICULUM DESIGN

IDEOLOGIES

There are two ideologies that will guide the creation of NETO. These are a liberal interpretation of religious orthodoxy and progressivism. In Elliot Eisner’s article on Curriculum Ideologies, he states “ideologies in general are belief systems that provide the value promises from which decisions about practical educational matters are made.” In the context of this for-profit organization, customer and company decisions are based on company values and its culture. For Cisco, statements like the ones found on the company’s culture and values website:

"Our culture defines how we treat our customers and each other."

"At Cisco, the elements of our culture help us to solve problems."

"[Our culture] serves as a hiring profile."

"People can learn on the job by emulating the behaviors they see."

The belief system at Cisco provides a base from which its employees can learn how to approach their work environment, their work and the relationships personal and professional relationships they build.

Elliot Eisner in this same article later says “One features that all religious orthodox ideologies share is their belief in the existence of God and the importance of God’s message in defining the content, aims and conditions of educational practice.” There is no religious affiliation tied to Cisco. However, the values and its culture are strong components and are threaded into the functioning of the company. For example, the ID badge is the first dose of culture that new hires are exposed to upon starting their jobs. This badge is worn during the workday, and enables employees access to secured buildings. Attached to this badge are two other cards that are similar in shape and material. These cards have content printed on them that outlines the company vision, mission, goals and culture. In this way, employees can reference them to know where the company is headed and how it proposes to attain its goals. All employees wear this badge for security and cultural reasons.

As an ideology, religious orthodoxy is a good match for guiding the creation of NETO because Cisco’s culture or belief system is so apparent in how it influences the decisions that occur. Eisner shares in this same article that “It should also be said that ideologies are never as definite or clear in practice as they are on paper. In addition, interpretations of any particular ideology differ, even among their adherents; hence, what follows are, of necessity, general characterization of ideological positions rather than unassailable descriptions of the particular views of individual adherents.” A liberal interpretation of this ideology will be applied to NETO because it will parallel the same exposure that employees have to Cisco’s beliefs. Although Cisco’s culture is visible, it is not a dominating feature of the environment. Similarly, the NETO will use this same strategy.

Progressivism is an ideology that stems from the work of John Dewey. In his 1938 book, Experience and Education, he explains,” that the new philosophy of education is committed to some kind of empirical and experimental philosophy. But experience and experiment are not self-explanatory ideas. Rather, their meaning is part of the problem to be explored.” He further states that, “the principle of continuity of experience means that every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after.”
This continuity of experience is an important idea when individuals work at Cisco, because their assimilation in the organization is based on their ability to use their past work experiences and domain knowledge to adapt to their new work environment. The NETO will help employees to make connections between their current knowledge of technology and their current practices and the new ways they should consider using these tools. This opportunity that new hires have to build on their existing experiences in their use of technology also parallels the organization’s desire to have employees think about how they can “stretch goals” both in terms of their work and their learning. Dewey concludes in his chapter on Criteria of Experience that:

“We always live at the time we live and not at some other time and only by extracting at each present time the full meaning of each present experience are we prepared for doing the same thing in the future. This is the only preparation which in the long run amounts to anything.”

A meaningful NETO experience, where new hires can learn how to elevate their understanding of new practices of technology, will enable them to grow in their ability to do their work with greater fluency and productivity because their choices will be informed.

GOALS
The full curriculum will focus on teaching strategic knowledge on five programs that are dependent on a network. These five programs are NetMeeting, IP phones, voicemail, Meeting Maker, and NT servers. Since each has unique benefits and limitations, each program will be taught in its own discrete unit. Ultimately, the curriculum will enable the learner to meet the four following goals:
1. To develop a conceptual understanding of a network.
2. To learn the benefits and limitations to using NetMeeting, IP phones, voicemail, Meeting Maker, and NT servers.
3. To learn how these technologies fit into the context of work
4. To understand how the application of strategic knowledge around these technologies relate to Cisco culture.

A learner can demonstrate understanding of material in six ways (Wiggins and McTighe, 1998): explain, apply, interpret, sees in perspective, demonstrates empathy, and reveals self-knowledge. In the end, we will be able to gauge learner success in mastering concepts from NETO if they can demonstrate their understanding in these ways:
• Overall, new hires make fewer calls to the TRC/ITS. (apply)
• There is an increased use of the applications taught by measuring the server usage. (apply)
• New hires are able to articulate their problems or misunderstandings to the TRC/ITS or other sources. (reveals self-knowledge)
• New hires can make informed decision about the technologies they use to do their work. (apply)

ACTIVITIES
Since the NETO will be delivered in a self-contained fashion on Cisco’s intranet, the curriculum requires a design that takes into account the absence of an instructor. For this reason, the activities will be self-monitored. Although it is important to be aware of the learner’s progress, in this case it would be difficult to directly measure the learner’s progress. A lack of understanding on behalf of the learner will directly affect his or her work efficiency.

The learners will be given an overview of NETO, which will help frame the purpose of the training and provide the learners will an idea of what they can expect to learn and in what format. We will use authentic tasks that will be presented in the form of simulated scenarios as a way for learners to interact with NETO. Next, they will be introduced to a problem statement and some choices; these choices
correspond to a particular expert path. The learner will make strategic decisions along their path to the final outcome. Along the way, the learner will have access to help presented in the form of four different buttons: what, why, how and just show me, whose descriptions are outlined below:

- "What do I do?": Offers suggestions on how the learner can approach the problem statement or how the learner can think about the given choices.
- "How do I do that?": Provides guiding help on the steps that need to be performed in order to complete the next sub-task.
- "Why do I do that?": Provides context help. This button communicates the benefits and limitations of the choice technology that the learner would make.
- "Just show me the final answer": This button is available at each decision making point in order to provide the learner with an exit and access to the final solution. Whenever this button is pressed, the learner will be provided with the complete path that’s delineated by the first set of choices that can be made. The learner will be able to follow a strand for each of the choices and can read the benefits and limitations in each situation.

The new hire’s knowledge will be scaffolded against the experts. If more assistance is needed, then new hires will have control over how much help he or she needs, how to make these decisions, what they should consider, and why he or she needs to think in these ways based on the type of help button that is selected. In addition, the learner will have control over the timing of the assistance that is selected.

ASSESSMENTS

In the case of our curriculum, the activities and assessment will work together to help the learner self-assess and self-diagnose his or her domain knowledge. Drawing upon the learner’s self-motivation, ability to self-regulate (Shin, 1998), which is a learner’s ability to be an active participant in his or her learning, and his or her “belief that he or she can successfully execute the behavior required to produce certain outcome” (Bandura, 1977), the learner will reflect on his or her ability to work through the scenario, the types of help that he or she solicited and his or her ability to perceive how this knowledge is more strategic than his or her domain knowledge. The self-assessment piece will provide the learner with a review of strategic questions that will remind him or her of how to approach these tasks in his or her work. From here, the learner will be provided with choices to either progress to the next scenario or return to the current scenario to look for specified information. Through this self-diagnostic process, the learner will learn how to change behavior through the acquisition of new strategic knowledge. In addition, the learner will be asked to reflect on the kind of help that he or she chooses to use. Depending on the help, specific recommendations will be made.

To assess whether or not this curriculum meets its goals, a longitudinal study would have to be conducted to examine whether or not the desired outcomes had been reached and if the learners had acquired this strategic knowledge.

AUDIENCE

The types of new employees who will be utilizing NETO are men and women who need assistance in understanding the meta-cognitive dimension of networked technologies at Cisco. These individuals will range from novices, employees who are completely new to the Cisco technologies, to near experts, employees who have a working procedural understanding of the technologies but who may need to learn how these technologies can be best used in their work setting.
ASSUMPTIONS
The assumptions we will be making about our audience are the following:

• New hires have working knowledge of computers, email, MS Office, and voicemail.
• New hires have experience using the Internet and World Wide Web.
• New hires who consider themselves to be technical experts will not participate in NETO. Thus choosing to learn through NETO will be a self-selecting process.

DELIVERABLE
The NETO will be delivered on a computer because its content pertains to tools and other technologies that reside on or require the use of a computer. The learning experience is also individualized in order to provide a safe environment for failure. The employee can explore the NETO at his or her desired pace, self-regulate, and remediate as needed. A web-based offering allows users to get immediate feedback on their progress. Furthermore, employees will have the ability to access the course from anywhere, as long as they are connected to the network. In this way, it also allows the user to access the course at his or her convenience.

The course itself will be built using a particular developer tool called Evolution, which has multimedia capabilities, which have important implications for the curriculum design. As stated previously, other current teaching tools available at Cisco are not interactive, display dynamic processes in static form, and teach all concepts in a behaviorist way. By only focusing on what learners need to understand on a meta-cognitive level, we have determined the process driven, conceptual ideas that could be demonstrated using animation and interactivity.
BROAD OUTLINE

1. Overview of NETO (opening page of the RLO)
   a. Introduction
   b. What is NETO?
      i. learn strategic knowledge about the network and around network programs such as *NetMeeting* and *Meeting Maker*
      ii. engage in interactive scenarios, where you make decisions on common work tasks
      iii. teach you how experts approach these work tasks and situations in which these decisions are made
   c. What NETO is not.
      i. A training that explains distinct features and functions about tools
      ii. A list of step by step procedures that explain how to use tools found on the Cisco image
   d. Summary

2. Lesson 1: NT servers (RIO)
   a. Overview
   b. Goals
      i. To obtain a cognitive understanding of how the NT server is a part of the Cisco network
      ii. To understand the purpose and the benefits of the NT server as they relate to Cisco values of open communication and teamwork
   c. Learning Problems
      i. How can I best use the NT server?
      ii. What are the benefits and limitations of the NT server?
      iii. Why is the NT server important?
      iv. What considerations should I take into account when deciding how to use the sharepoint?
   d. Learning objectives
      i. Understand the benefits of the NT servers
         a. Stability – Servers are only shut down during non-business hours. You will be notified otherwise.
         b. Security – Accessing files in a sharepoint requires authorization.
         c. Backed Up – All data on NT servers is backed up every night.
         d. Suggestions – “Even though sharing files from your computer is easy, we strongly encourage you to make the request to your computer support group and have the sharepoint set up on the server. Doing it right the first time will prevent re-work and frustration down the road. *Anything that needs to be accessible to any other CISCO employee should be on an NT server* (other than documentation found on the corporate World Wide Web).”
      ii. Understand the limitations of the NT servers
         a. Laptop users need to be logged onto the network to access files remotely
         b. Server may be difficult to log into remotely
         c. Unless a shortcut is created from the desktop, the path to the sharepoint requires numerous clicks
         d. The path to the sharepoint can be difficult to remember.
      iii. Understand factors that frame your decision
a. Private vs. public folder (is the information confidential to the group?)
b. Number of people working on the team
c. Project length
d. Impact on teamwork and communication
e. Activity: Advanced Simulated Scenario
f. Self-Assessment

3. Lesson 2: NetMeeting (RIO)
a. Overview
b. Goals
   i. To obtain a cognitive understanding of NetMeeting and how to use it effectively
   ii. To relate how NetMeeting relates to open communication, quality team, teamwork
   iii. To understand concepts of global collaboration, virtual teaming, and telecommuting
c. Learning Problems
   i. Mental disconnect between a phone call and NetMeeting call.
   ii. How can the NetMeeting be used in conjunction with a desktop phone, MM or Instant Messenger for concurrent voice?
   iii. When is it NetMeeting a value-add?
   iv. How can it be used effectively?
   v. What are its limitations (how many people can call at once; how many on video)?
d. Learning objectives
   i. How to schedule a meeting
   ii. How to conduct a meeting
   iii. How to record a meeting (whiteboard, and chat)
   iv. Which software is accessible for different theatres
   v. Features (how can they be best used)
      a. Video and Audio Conferencing
      b. Whiteboard and window capture (draw on a netscape capture, e.g.)
      c. Chat
   d. Internet Directory
e. File Transfer
   f. Program Sharing and control sharing!,
g. Remote Desktop Sharing
   h. Security
   i. Advanced Calling
vi. Advanced Features
   a. Receive video without sending video
   b. “Whisper” mode in audio, video, and chat
   c. Copy video images
   d. Edit whiteboard image before meeting starts
   e. Can specify who has edit rights to a shared file
e. Activity: Advanced Simulated Scenario
f. Self-Assessment

4. Lesson 3: Meeting Maker (RIO)
a. Overview
b. Goals
   i. To obtain a cognitive understanding of groupware and how it is made successful
   ii. To understand the purpose and benefits of Meeting Maker and how it relates to the Cisco values of open communication and teamwork.

c. Learning Problems
   i. What is groupware?
   ii. What is required for successful use of groupware?
   iii. What is Meeting Maker and why is it important?
   iv. Why is Meeting Maker connected to the network?
   v. What are the important features of Meeting Maker?

d. Learning objectives
   i. Define groupware.
      a. Software created to aid workflow and communication among group members.
   ii. Define the requirements of successful groupware use.
      a. Everyone in the group must use it.
      b. All appointments must be put into each individual's calendar.
      c. Meeting Maker account should remain open during the work day or should be checked frequently for new invitations.
   iii. Explain Meeting Maker Proxy access and etiquette
      a. Proxy allows an individual access to another's MM account.
      b. Etiquette calls for the viewer to ignore personal appointments and seek only professional obligations, which may cause scheduling conflicts. This requires trust.
   iv. Explain the important features
      a. Set up
      b. Proxies
      c. Scheduling a meeting
      d. Replying to a meeting
      e. Sending invitations
      f. To do lists

e. Activity: Advanced Simulated Scenario
   f. Self-Assessment

5. Summarizing main ideas
NETO Overview
(the first web page in the curriculum)

Introduction
Welcome to the Cisco Network! Learning how to be strategic about programs that are dependent on the network can help you to be efficient in your teamwork and communication with others. Realizing the benefits and limitations of these tools will impact how your work gets done and how you can work effectively for your clients and customers.

What is NETO?
It will help you learn strategic knowledge about the network and around network programs such as NetMeeting and Meeting Maker
It will engage you in interactive scenarios, where you make decisions on common work tasks
It will teach you how experts approach these work tasks and situations in which these decisions are made

What NETO is NOT.
A training that explains distinct features and functions about tools
   If you need this kind of help, review the NetMeeting* and Meeting Maker* tutorials
A list of step by step procedures that explain how to use tools found on the Cisco image
   If you need this kind of help, browse through the TRC/ITS library*

Summary
By completing this training, you will be able to think strategically around the following items:
   NetMeeting
   Meeting Maker
   NT Server

And, understand how these tools fit into your work.

*Hyperlinks
LESSON 1: NT Server

Overview of NT Servers

NT servers store information for employees and enable them to perform certain tasks. The architecture of the network is designed so that specific sites and divisions share server space. Each employee has a personal folder that has private and public capabilities for saving and storing information. (Private folders are password protected.) Teams can also create a workgroup folder that also has public and private features. (These private folders are also password protected.)

Learning Goals
- To obtain a cognitive understanding of how the NT server is a part of the Cisco network
- To understand the purpose and the benefits of the NT server as they relate to Cisco values of open communication and teamwork

Learning Problems Being Addressed
- How can I best use the NT server?
- Why is the NT server important?
- What considerations should I take into account when deciding how to use the sharepoint?
- What are the benefits and limitations of the NT server?

Learning Objectives
- Understand the benefits of the NT servers
  - **Stability** – Servers are only shut down during non-business hours. You will be notified otherwise.
  - **Security** – Accessing files in a sharepoint requires authorization.
  - **Backed Up** – All data on NT servers is backed up every night.
  - **Suggestions** – “Even though sharing files from your computer is easy, we strongly encourage you to make the request to your computer support group and have the sharepoint set up on the server. Doing it right the first time will prevent re-work and frustration down the road. *Anything that needs to be accessible to any other CISCO employee should be on an NT server* (other than documentation found on the corporate World Wide Web).”
- Understand the limitations of the NT servers
  - Laptop users need to be logged onto the network to access files remotely
  - Server may be difficult to log into remotely
  - Unless a shortcut is created from the desktop, the path to the sharepoint requires numerous clicks
  - The path to the sharepoint can be difficult to remember.
- Understand factors that frame your decision
  - Private vs. public folder (is the information confidential to the group?)
  - Number of people working on the team
  - Project length
  - Impact on teamwork and communication
### Activity

**Problem statement:**

“Your team manager has assigned you the role of being the minutes keeper for your virtual meeting. At the end of the meeting you need to archive and distribute this information.”

Of the choices below, what is your initial step in this archiving process?

- A) go to My Network Places to save document in the NT sharepoint
- B) create a folder on your desktop (go to page 18 to look at this path/solution)

<table>
<thead>
<tr>
<th>What do I do?</th>
<th>Choice A</th>
<th>Choice B</th>
</tr>
</thead>
</table>
| Consider the number of people who need to access this information and how your choice may help in your teamwork, communication, and time later. | Consider the number of people who need to access this information and how your choice may help in your teamwork, communication, and time later. | Your desktop is connected to the Cisco network. Benefits of your desktop computer  
  • You can access the information easily  
  • You can easily find this information to attach to an email to share with others if you are working on a small team  
  Limitations of your desktop computer  
  • You need to determine another method to back-up this document  
  • Information is not stored in a centralized location  
  • If you send a file as an attachment, large file size takes long time to download  
  • Others will depend on your to access this information |

| Why do I do that? | A sharepoint is server space found on the Cisco network. Benefits of the NT server  
  • Server is safe and secure  
  • Server is accessible by anyone who is logged onto the network  
  • Server is appropriate place to store information for large teams  
  • Centralized location for information storage  
  Limitations of the NT server  
  • Server may be difficult to log into remotely  
  • Unless a shortcut is created from the desktop, the path to the sharepoint requires numerous clicks  
  • The path to the sharepoint can be difficult to remember. | Your desktop is connected to the Cisco network. Benefits of your desktop computer  
  • You can access the information easily  
  • You can easily find this information to attach to an email to share with others if you are working on a small team  
  Limitations of your desktop computer  
  • You need to determine another method to back-up this document  
  • Information is not stored in a centralized location  
  • If you send a file as an attachment, large file size takes long time to download  
  • Others will depend on your to access this information |

| How do I do that? | You need to find the path to the appropriate sharepoint or create a shortcut that resides on your desktop. | There is more than one way to create a folder. Apply your own strategy for completing this task. |

| Just show me the final answer. | The learner will be directed to the final answer based on this answer choice. (go to page 19) | The learner will be directed to the final answer based on this answer choice. (go to page 21) |
If choice (A), then the scenario continues.
“Now that you’ve located your team’s sharepoint. Determine where to save the document.”

a) save the minutes in the public folder
b) save the minutes in the private folder

<table>
<thead>
<tr>
<th>Choice a</th>
<th>Choice b</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What do I do?</strong></td>
<td><strong>What do I do?</strong></td>
</tr>
<tr>
<td>Consider whether or not this information is confidential and who should have free access to this information. Does it matter?</td>
<td>Consider whether or not this information is confidential. Is it necessary for only select people to access this information? What are the consequences if this information is accessible by anyone?</td>
</tr>
<tr>
<td><strong>Why do I do that?</strong></td>
<td><strong>Why do I do that?</strong></td>
</tr>
<tr>
<td>Benefits to saving in the public folder • Documents can be read by anyone who knows that it exists or who haphazardly finds it</td>
<td>Benefits to saving in the private folder • Individuals with authorization only have access to this information • Stores confidential and sensitive team information</td>
</tr>
<tr>
<td>Limitations to saving in the public folder • Public folders do not protect against truly confidential or sensitive information</td>
<td>Limitations to saving in the private folder • Authorization set-up is required for all users</td>
</tr>
<tr>
<td><strong>How do I do that?</strong></td>
<td><strong>How do I do that?</strong></td>
</tr>
<tr>
<td>Select the public folder at the team’s sharepoint.</td>
<td>Select the private folder at the team’s sharepoint.</td>
</tr>
<tr>
<td><strong>Just show me the final answer.</strong></td>
<td><strong>Just show me the final answer.</strong></td>
</tr>
<tr>
<td>The learner will be directed to the final answer based on this answer choice. (go to page 19)</td>
<td>The learner will be directed to the final answer based on this answer choice. (go to page 21)</td>
</tr>
</tbody>
</table>

If choice (a) or (b), then scenario continues.
“You prepare to send an email to the team that includes the following information:”
1) the path, described in words, to the sharepoint
2) the url of the sharepoint

<table>
<thead>
<tr>
<th>Choice 1</th>
<th>Choice 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What do I do?</strong></td>
<td><strong>What do I do?</strong></td>
</tr>
<tr>
<td>Consider what will be most cost time saving effective for your teammates.</td>
<td>Consider what will be most cost effective for your teammates.</td>
</tr>
<tr>
<td><strong>Why do I do this?</strong></td>
<td><strong>Why do I do this?</strong></td>
</tr>
<tr>
<td>Benefits to describing the path to the sharepoint in words • Teammates will learn the path to the sharepoint</td>
<td>Benefits to including the url • Teammates can just click on the hyperlink. • You do not have to explain the step by step path to the sharepoint. • Teammates will save time in locating information.</td>
</tr>
<tr>
<td>Limitations to describing the path to the sharepoint in words • Teammates do not have quick access to the information • You will need to explain to your teammates how to find this information.</td>
<td>Limitations to including the url • Teammates do not know the step by step path to the sharepoint</td>
</tr>
<tr>
<td><strong>How do I do it?</strong></td>
<td><strong>How do I do it?</strong></td>
</tr>
<tr>
<td>You will need to determine the exact path to the sharepoint and explain to your teammates how to get the document.</td>
<td>Make sure that the url is correct</td>
</tr>
<tr>
<td><strong>Just show me the final answer.</strong></td>
<td><strong>Just show me the final answer.</strong></td>
</tr>
<tr>
<td>The learner will be directed to the final answer based on this answer choice. (go to page 19)</td>
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</tr>
</tbody>
</table>
Congratulations! You have explored one strategic approach to archiving and disseminating information. To examine the other strategic approach, try the “desktop” method.

Go to the summary for final suggestions about shortcuts on page 22.

**If choice (B), then the scenario continues**

“Now that you’ve saved the minutes to your desktop folder, you send an email to your teammates. How do you include information from the minutes in this email?

a) send an email attachment
b) paste the text into the body of the email

<table>
<thead>
<tr>
<th></th>
<th><strong>Choice a</strong></th>
<th><strong>Choice b</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What do I do?</strong></td>
<td>Consider what will be most cost effective for your teammates.</td>
<td>Consider what will be most cost effective for your teammates.</td>
</tr>
<tr>
<td><strong>Why do I do that?</strong></td>
<td>Benefits&lt;br&gt;• Teammates can download information to their desktop&lt;br&gt;Limitations&lt;br&gt;• Information is not stored in a centralized location&lt;br&gt;• Difficult to track information (version changes)</td>
<td>Benefits&lt;br&gt;• Teammates can immediately read information&lt;br&gt;Limitations&lt;br&gt;• Information is not stored in a centralized location&lt;br&gt;• Difficult to track information</td>
</tr>
<tr>
<td><strong>How do I do that?</strong></td>
<td>Apply your current email knowledge.</td>
<td>Apply your current cutting and pasting text skills.</td>
</tr>
<tr>
<td><strong>Just show me the final answer.</strong></td>
<td>The learner will be directed to the final answer based on this answer choice. (go to page 19)</td>
<td>The learner will be directed to the final answer based on this answer choice. (go to page 21)</td>
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</tbody>
</table>

Congratulations! You have explored one strategic approach to archiving and disseminating information. To examine another strategic approach, try the sharepoint method.

Go to the summary for final suggestions about shortcuts on page 22.
<table>
<thead>
<tr>
<th>Decision choice</th>
<th>What you considered</th>
<th>Weighing the benefits and limitations</th>
<th>Knowing how to do that</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go to Network neighborhoods to save document in the NT sharepoint</td>
<td>• Number of teammates who need to access this information</td>
<td>• A sharepoint is server space found on the Cisco network.</td>
<td>• You need to find the path to the appropriate sharepoint or create a shortcut that resides on your desktop.</td>
</tr>
<tr>
<td></td>
<td>• Duration of the project</td>
<td>• Benefits of the NT server</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• How can I improve my teamwork?</td>
<td>• safe and secure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• How will this decision improve communication?</td>
<td>• accessible by anyone who is logged onto the network</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• appropriate place to store information for large teams</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Centralized location</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Limitations of the NT server</td>
<td>• may be difficult to log into remotely</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• unless a shortcut is created from the desktop, the path to the sharepoint requires numerous clicks</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• path to the sharepoint can be difficult to remember.</td>
<td></td>
</tr>
<tr>
<td>save the minutes in the public OR private folder</td>
<td>• Is the information confidential?</td>
<td>• Benefits to saving in the public folder</td>
<td>Select the public folder at the team’s sharepoint.</td>
</tr>
<tr>
<td></td>
<td>• Who should have free access?</td>
<td>• Documents can be read by anyone who knows that it exists or who haphazardly finds it</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• What are the consequences if this information is shared accessible by anyone?</td>
<td>• Limitations to saving in the public folder</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• How will my decision impact my teamwork?</td>
<td>• Public folders do not protect against truly confidential or sensitive information</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• How will my decision impact communication?</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Benefits to saving in the private folder</td>
<td>• Individuals with authorization only have access to this information</td>
<td>Select the private folder at the team’s sharepoint.</td>
</tr>
<tr>
<td></td>
<td>• Stores confidential and sensitive team information</td>
<td>• Limitations to saving in the private folder</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Limitations to saving in the private folder</td>
<td>• Authorization set-up is required for all users</td>
<td></td>
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<td>Decision choice</td>
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<td>-------------------------------------</td>
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<td>--------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>the path, described in words, to the sharepoint</td>
<td>• What is the most efficient and effective explanation for your teammates?</td>
<td>• Benefits to describing the path to the sharepoint in words</td>
<td>• Determine the exact path to the sharepoint and explain to your teammates how to get the document.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Teammates will learn the path to the sharepoint</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Limitations to describing the path to the sharepoint in words</td>
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<td>• Teammates do not have quick access to the information</td>
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<tr>
<td></td>
<td></td>
<td>• You will need to explain to your teammates how to find this information.</td>
<td></td>
</tr>
<tr>
<td>the url of the sharepoint</td>
<td>• What is the most efficient and effective explanation for your teammates?</td>
<td>• Benefits to including the url</td>
<td>• Make sure that the url is correct</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Teammates can just click on the hyperlink.</td>
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<td></td>
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</tbody>
</table>
### Decision choice

<table>
<thead>
<tr>
<th>What you considered</th>
<th>Weighing the benefits and limitations</th>
<th>Knowing how to do that</th>
</tr>
</thead>
<tbody>
<tr>
<td>create a folder on your desktop</td>
<td>• Consider the number of people who need to access this information and how your choice may help in your teamwork, communication, and time later.</td>
<td>• There is more than one way to create a folder. Apply your own strategy for completing this task.</td>
</tr>
<tr>
<td>send an email attachment OR paste the text into the body of the email</td>
<td>• Which method will make your teammates’ work more efficient in the long run?</td>
<td></td>
</tr>
<tr>
<td>Benefits of your desktop computer</td>
<td>• You can access the information easily • You can easily find this information to attach to an email to share with others if you are working on a small team</td>
<td></td>
</tr>
<tr>
<td>Limitations of your desktop computer</td>
<td>• You need to determine another method to back-up this document • Information is not stored in a centralized location • If you send a file as an attachment, large file size takes long time to download • Others will depend on your to access this information</td>
<td></td>
</tr>
<tr>
<td>Benefits of an email attachment</td>
<td>• Teammates can download information to their desktop</td>
<td>Apply your current email knowledge.</td>
</tr>
<tr>
<td>Limitations of an email attachment</td>
<td>• Information is not stored in a centralized location • Difficult to track information (version changes)</td>
<td></td>
</tr>
<tr>
<td>Benefits of placing text in the email body</td>
<td>• Teammates can immediately read information • Good choice if the contents of the minutes is a small list</td>
<td>Apply your current cutting and pasting text skills.</td>
</tr>
<tr>
<td>Limitations of placing text in the email body</td>
<td>• Information is not stored in a centralized location</td>
<td></td>
</tr>
</tbody>
</table>
Summary/Self-Assessment

There are strategies that Cisco utilizes when archiving information that can improve teamwork efficiency and communication.

When determining HOW and WHY to use different approaches used to archive and share information, consider the following questions:

- What are the benefits and limitations to using the sharepoint on the NT server?
- What is the nature of the information that will be shared and archived?
  - Is it confidential?
  - Can it be accessible to all employees who haphazardly locate it?
- What are the conditions of my teamwork? Large vs. small team. Long-term project vs. short-term.
- If I choose not to use the NT server to store information, how else will I back-up my documents?
- How can I create short-cuts for my teammates?
- How will my decisions affect my teamwork and communication?
- How will remote access issues affect a teammates ability to retrieve information?

Further recommendations:

| If you found yourself clicking often on the “what do I do?”, then | You might be overlooking the benefits and limitations. |
| If you found yourself clicking often on the “why do I that?”, then | You might be overlooking the considerations. |
| If you found yourself clicking often on the “how do I that?”, then | You might be overlooking the benefits and limitations as well as the considerations. |
| If you found yourself clicking often on the “just show me the final answer”, then | You are missing out on the opportunity to make decisions on your own. |

Next scenario*

Begin again*
NOTES

1 Intranet – An Intranet is an internal corporate website, which is not accessible to the general public, that is only available to Cisco employees for communicating company business.

2 Cisco’s culture has 12 themes that guide their business. The following is list of these themes as explained in John Chamber’s internal website.

As Cisco continues its rapid growth around the world, maintaining our culture is one of the greatest challenges we face. This is especially important given the fact that we have grown our workforce by 65% in the last year. I am asking leaders across the company to discuss one aspect of our culture at every staff meeting and help share the war stories that promote culture. Having said that, our empowerment culture makes this everyone’s responsibility. If you see someone doing something that doesn’t fit our culture, take the time to tell them why, and understand that maintaining our culture is key to our continued success.

Quality Team
Maintaining the quality of our team is critical to Cisco's success. We must continue to recruit the top 5 to 10 percent in the industry and manage out the bottom 5 percent. A strong, high quality team will help us maintain our leadership position and truly become one of the best places to work.

No Technology Religion
Time and time again, I have seen companies fall in love with technology and ask their customers to use it. But that's not always best for customers. Because customer satisfaction is our number one priority, I want Cisco employees to listen and provide the best solutions to meet our customers' needs. No technology religion means helping service providers provide broadband access to the home, for example, whether it's through cable models, DSL, or wireless solutions.

Stretch Goals
If I ask you to do something 10% better, what are you going to do? You're going to work a little harder. If I ask you to do something 50% better, you're going to have to do it differently. I believe in setting stretch goals that always makes us do things differently, and get 10 times the results. But, unlike other CEOs, I believe in setting stretch goals that we can achieve.

One and a half years ago, I asked the senior management team if they believed we could be a $50 billion company -- in five years. Almost none of them thought we could. Right now, we're well on our way to achieving it not in five years, but four, and there is a possibility that we could achieve this goal in three, by working smarter and faster.

Teamwork
Teamwork brings good people and good skills together in ways that help us continue raising the bar on our success. For the speed at which we are working, and will continue to work to maintain our leadership position, teamwork is critical. But as with everything we do, there's always room for improvement especially in this area. I have some teams who are great at teamwork, and others who need to improve. Those teams who work well across the company will be rewarded.

Empowerment
The Internet Revolution is about knowledge and how that knowledge is applied. It's about economies of skill and empowerment. At Cisco, empowerment is part of our culture, and I believe in empowering down to all levels of the organization. But empowerment only works if you have two things - if you know where we're going, and you have the data to make good decisions.

Fun
One of the reasons employees stay at a company is because they are working for a higher purpose. I am excited to come to work every day because I believe we have a great team that is truly going to help change the way the world works, lives, plays, and learns. As we build our company to last, I want Cisco to be the place where you want to retire, and one day will tell your grandchildren about. So let's work together as a team, and have fun doing it.
**Trust/Integrity/Giving Back**
Cisco was founded in an environment of open communication, empowerment, integrity and trust. These values remain at the forefront of our culture and our business decisions. We must maintain our commitment to these values and continue building a culture that understands what is acceptable and what is not. We will never compromise on issues of integrity. My goal is to continue promoting a culture that not only produces results but also ensures that Cisco is recognized as one of the most generous companies in the world. For years, we have given to communities around the world on a local, national and international level to help people learn to help themselves.

**Drive Change**
We must measure ourselves against both our internal goals and against how well we execute on the opportunities in the market. One of the keys to our success has been our ability to listen to our customers and react quickly and effectively to meet their needs. Only by continuing to drive change in the industry will we stay one to two waves ahead of the competition.

**Frugality**
Frugality is one of the core values that has made our company great. From my perspective, frugality means getting the best value for everything we do, financially and otherwise. I expect all employees to treat Cisco's resources as their own and to always look for ways of stretching our dollars.

**Market Transitions**
When is the best time to gain market share? During the tough times, when markets, technologies, or geographies are in transition. When Asia was having trouble a few years ago, all of our competitors pulled out. What did Cisco do? We added resources and focused on building relationships. While almost all of our competitors lost 10% in market share, we gained 42%. That year alone, Cisco made a 52% gain in market share. Cisco will always look to take advantage of market transitions.

**Open Communication**
Good communications both internally and with our customers and partners directly affects customer success. My expectation is that all leaders at Cisco will make communications a priority. This means being a good listener and taking the time to understand and respond to the issues behind the questions and concerns.

**Customer Success**
Customer success is not only a personal passion of mine, but our first priority as a company. No matter how good we are, the one thing that can bring us down is getting too far away from our customers. I've seen it happen time and time again, which is why we take a fanatical approach to customer success and view it as the foundation of our culture.

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3 *Evolution* is a program that enables instructional designers, who are individuals who develop trainings, to design and develop courses on the web. This program uses a particular method called Reusable Learning Object (RLO) strategy, which is based on Robert Horn's information mapping theory. This theory suggests that information be presented as chunks to enable the learner to digest the content easier. The strategy is called Reusable Learning Object because each piece of information that is created in *Evolution* is associated with an ID number and which is stored in a database.

The program itself has a particular hierarchy that helps the designer organize course material. On the broadest level is the course name, which is similar to the title of a book. Beneath the course is the learning object level (RLO), which is similar to the chapter of a book. The contents of the each chapter would be the same as the information objects (RIO), which are the smaller content items that comprise the chapter.
REFERENCES

Curriculum


Learning


http://www.hfni.gsehd.gwu.edu/~tip/knowles.html
Summary of andragogy theory

http://nlu.nl.edu/ace/Resources/Knowles.html
Web site about Malcolm Knowles

Content
(Research on content was done on the Cisco Intranet.)

http://wwwwin.cisco.com/chambers/mind/culture.html
Explanation of Cisco culture

TRC/ITS library: Groupware sharepoint information

http://wwwwin.cisco.com/trc/network/pcsecure.html#cisco_network
Explains how to access private folder, the security features
Information on the NT server

TRC/ITS library: access pathways and password information about NT servers

Benefits of the NT server

TRC/ITS library: printer support information

TRC/ITS library: policy on NT infrastructure and data types

TRC/ITS library: NT architecture

http://wwwin.cisco.com/
Cisco Intranet homepage: relevant and important information for all employees

http://wwwin.cisco.com/HR/newhire/
New hire dashboard: relevant and important information organized specifically for new hires

Portal to multimedia tutorials: *NetMeeting* and *Meeting Maker*