Business Objects XI Designer

Lesson 4: Managing Universes

Lesson Objectives

- List the coverage for this lesson
  - Maintaining the existing Universes
  - Exporting and sharing new Universes
  - Linking of Universes

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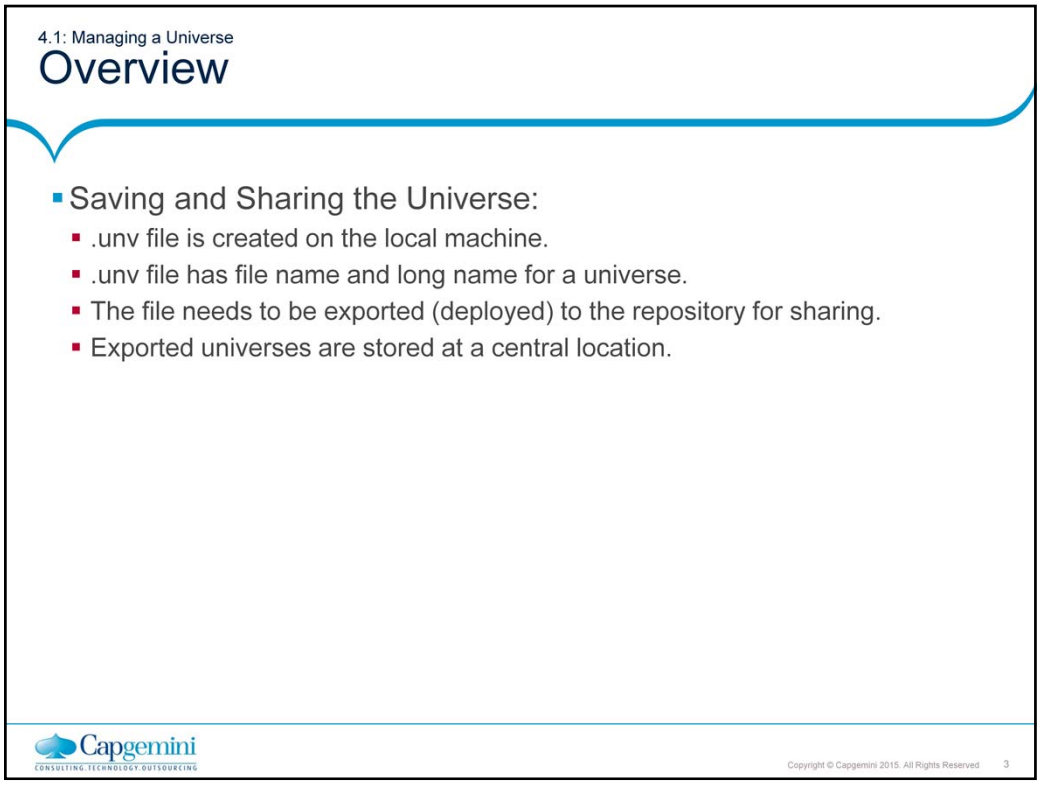
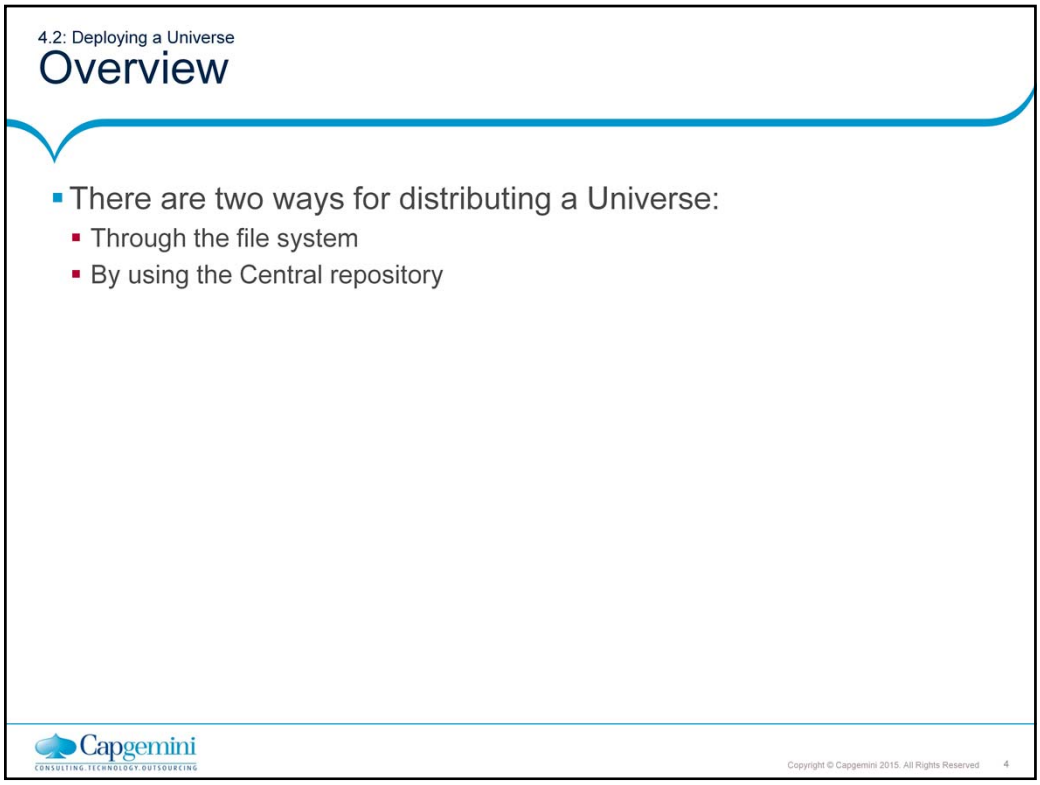


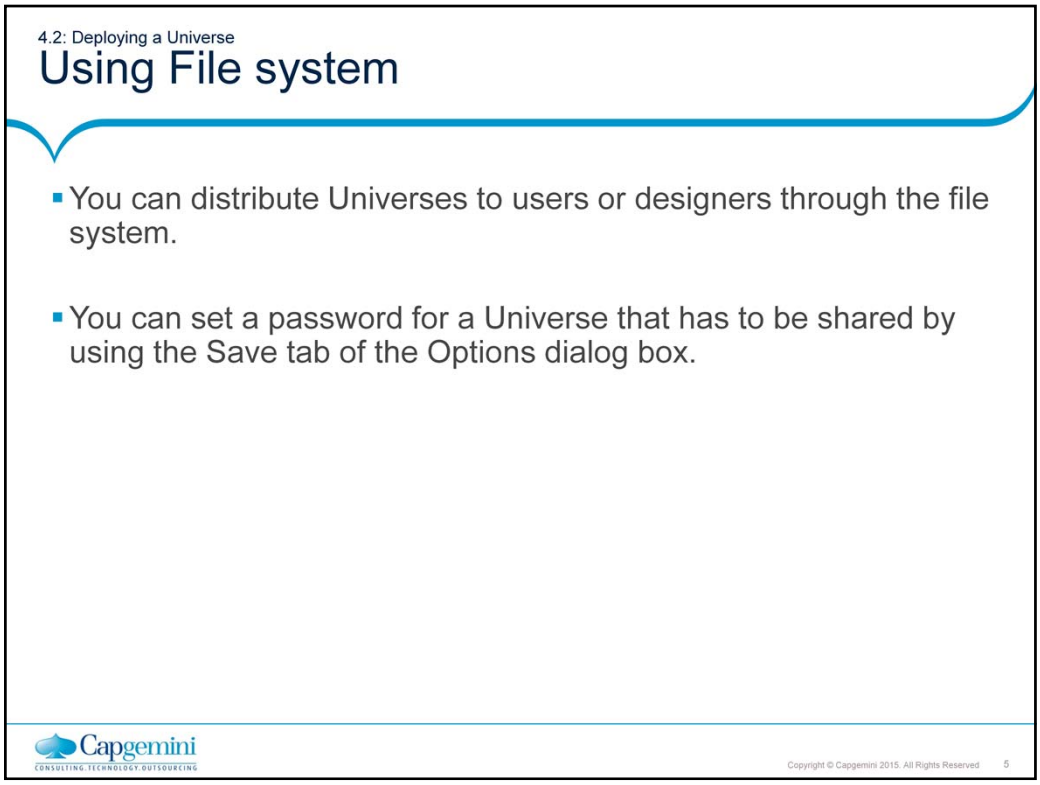
Managing Universe:

- When you save a Universe, Designer stores it as a file with a .unv extension. In Desktop Intelligence or Web Intelligence, the end user identifies the Universe by the Universe name. By default, Designer stores the files that you save in the Universe sub-folder.
- A file name can have at most 100 characters followed by .unv extension. A long name can have up to 35 characters and used to identify a universe by an end user.
- The Universe saved locally is available to Desktop Intelligence users only. In order to share the universe and make it available to other users, a developer needs to export the universe to the repository (CMS).

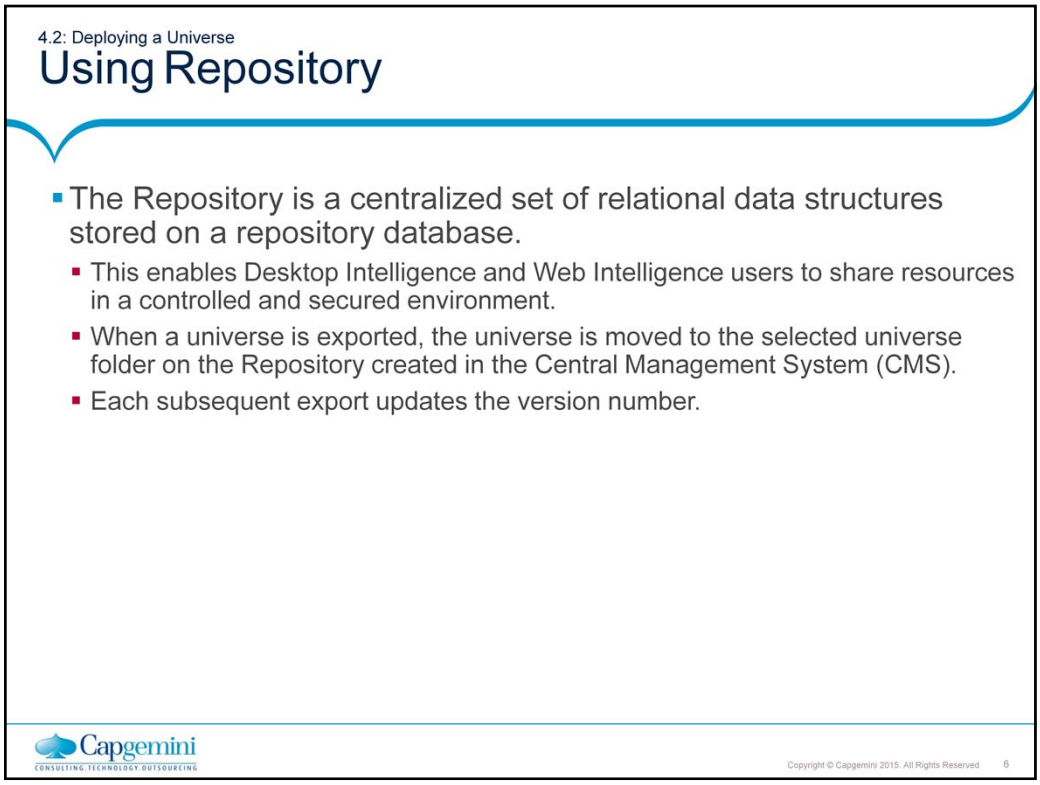


Deploying a Universe:

- When a Universe has completed the design, build, and test phases, a developer needs to distribute it to Desktop Intelligence and Web Intelligence users.
- A .unv file can be shared with other users to make it available to other Desktop Intelligence Users. In order to make it available to Web User, it needs to be exported.

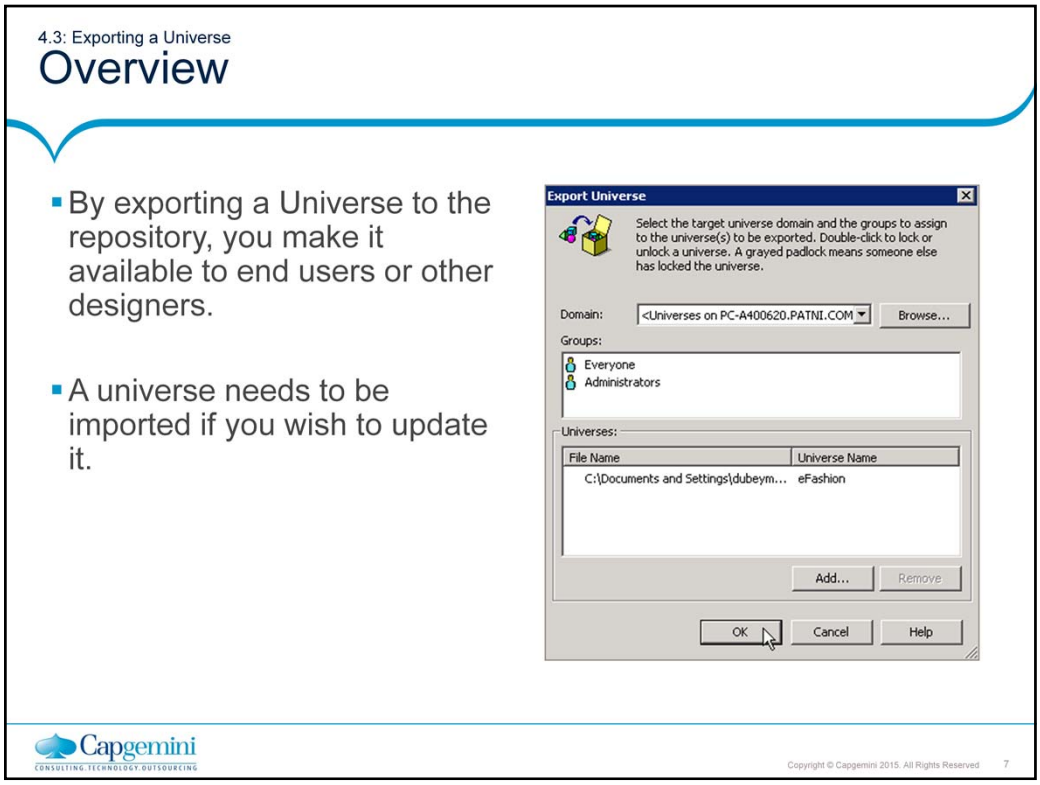


Using File System:
This method does not have the same degree of security and control as the repository does. It is the simplest way to make the universe available to selected users.



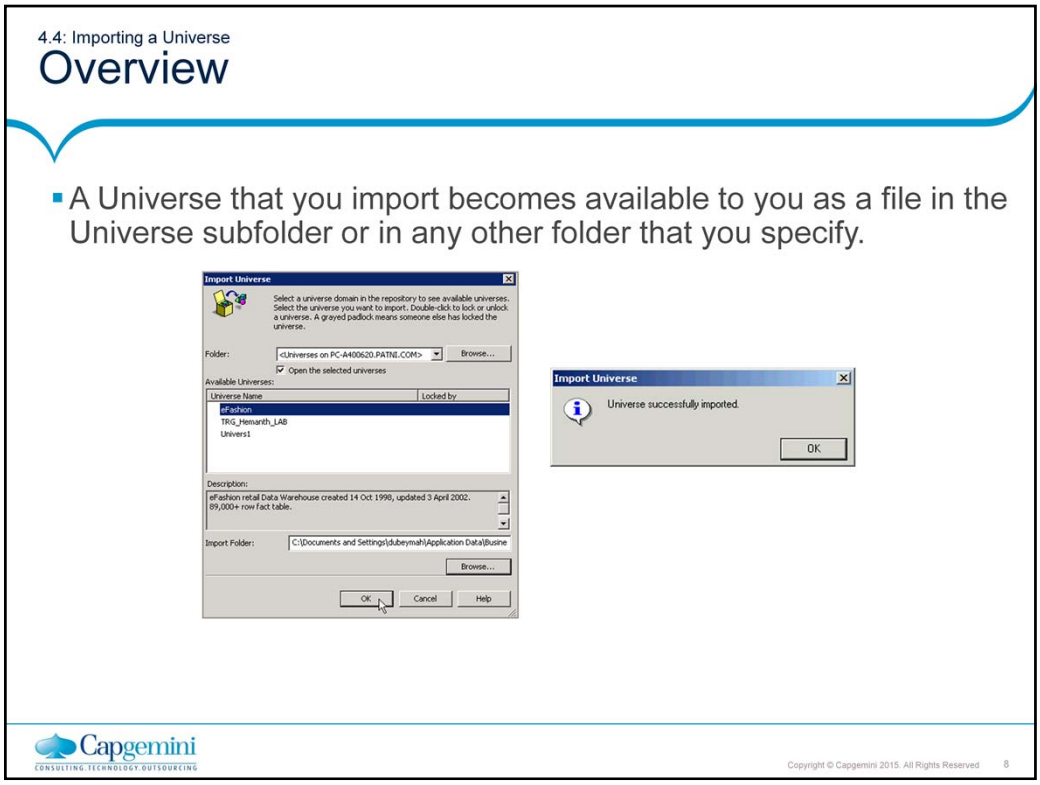
Using Repository:

- A repository is a centralized storage location to store various universes. An access to a universe is controlled by Central Management Console. Once the universe is exported, it is moved to the selected universe folder on CMS.
- A CMS also takes care of updating the universe version number each time a universe is exported.



Exporting a Universe:

- The Export and Import functionalities of Designer let you move Universes to and from the Repository.
- The following rules apply to the Universe identifiers stored in the Universe domains:
  - A Universe identifier is unique across all Universe domains.
  - The combination of file name and long name must be unique within a Universe domain.
- In order to make changes, one needs to import the universe from the repository.



Importing a Universe:

- In order to make changes in the already exported universe, a developer needs to import it from the repository. This makes the universe available in the local file system of a developer.
- It can be exported again after due modification or enhancement.

4.4: Importing a Universe

Demo on Universe Distribution

- Demonstration using Universe Distribution

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4.5: Setting up Restrictions

Concept

- A Restriction set is a named group of restrictions that apply to universe components.
- A Restriction set can be applied to a user or a group.
- Applying Restrictions limits the access for universe objects or resources to a user or a group of users.
- Restrictions can be applied for the objects, rows, query types, connection, and so on.
- Once assigned, restrictions get applied when the users log-in.

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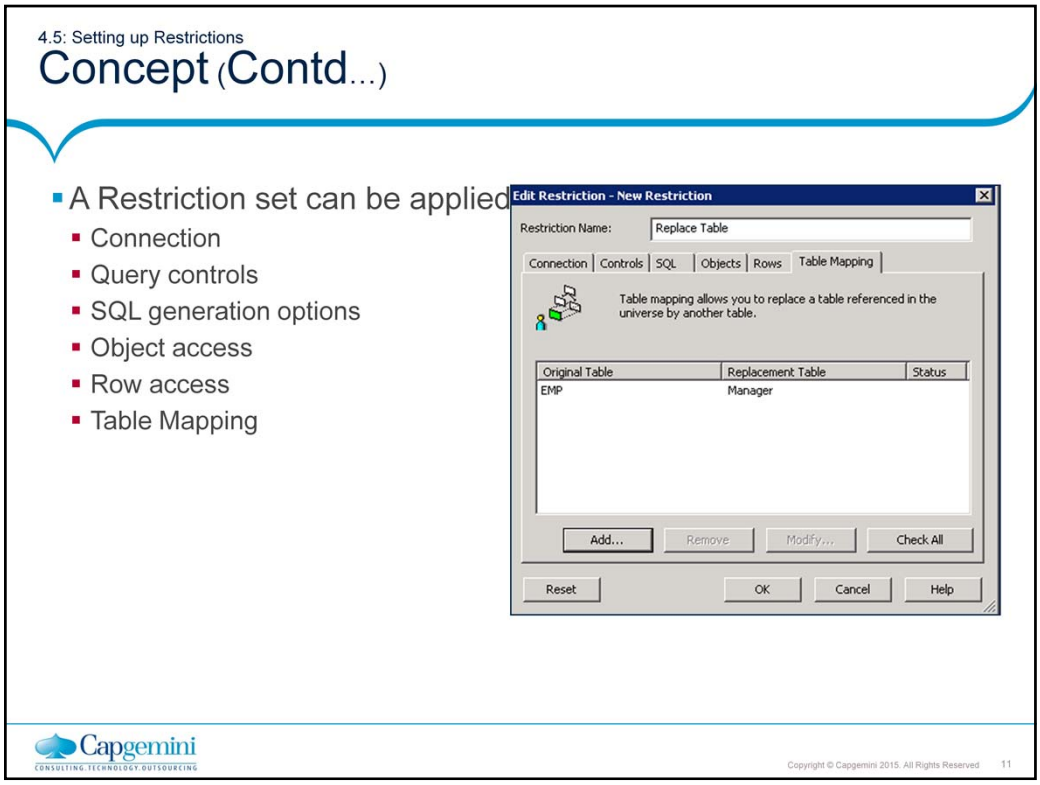
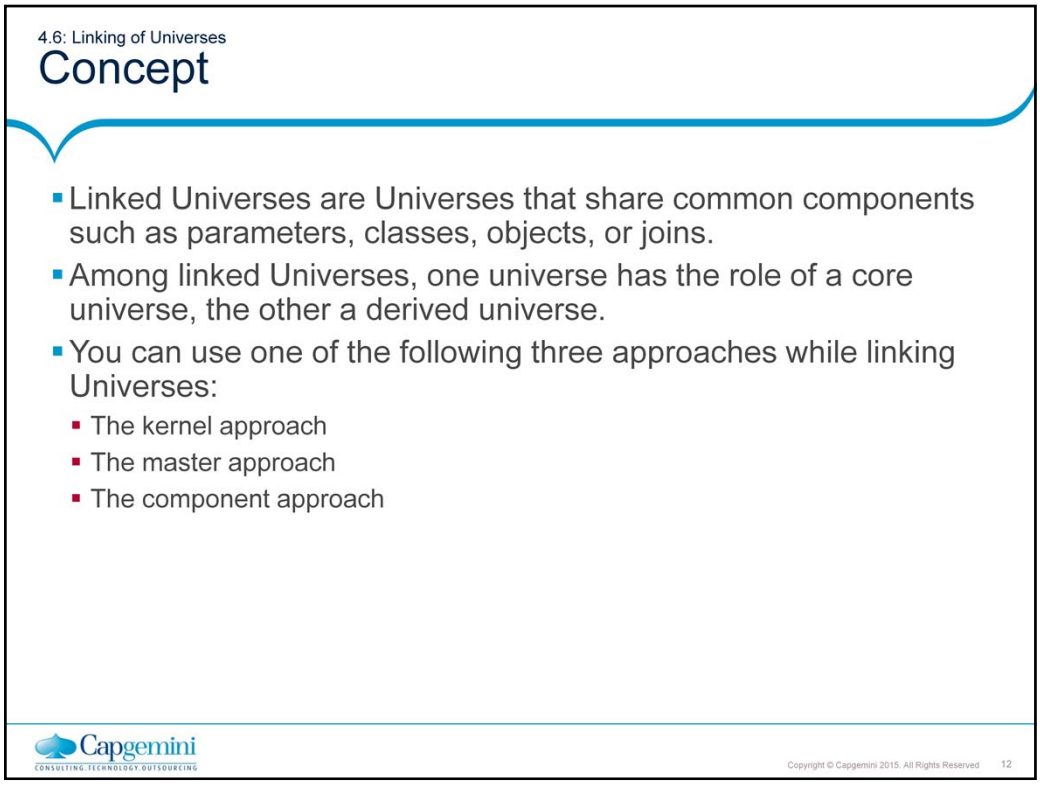


Setting up Restrictions:

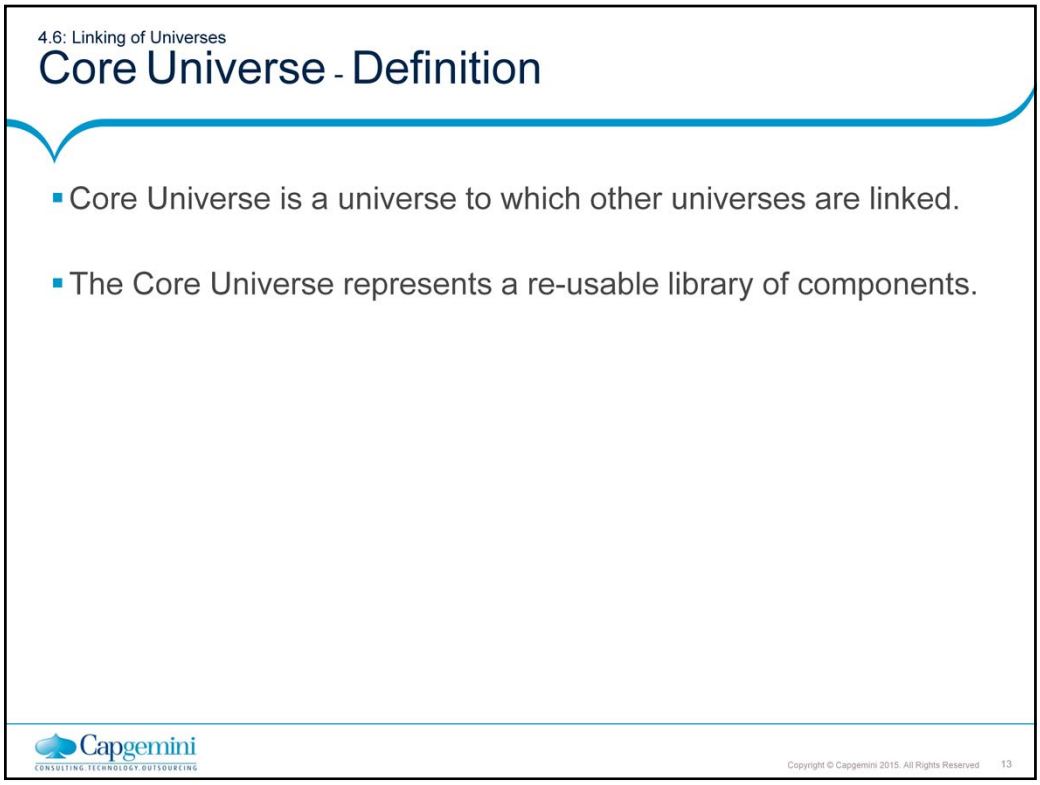
A Restriction set can be applied on the following:

- **Connection:** It enables to select an alternative connection for the universe. (Different for Development team and Testing team)
- **Query controls:** It provides options to limit the size of the result set and query execution time.
- **SQL generation options:** It provides options to control the SQL generated for queries.
- **Object access:** It specifies the objects that will not be accessible in this Universe.
- **Row access:** Defining a WHERE clause on the RDBMS table allows you to restrict access to rows, and limit the results returned by a query.
- **Table Mapping:** Table mapping allows you to replace a table referenced in the universe by another table.



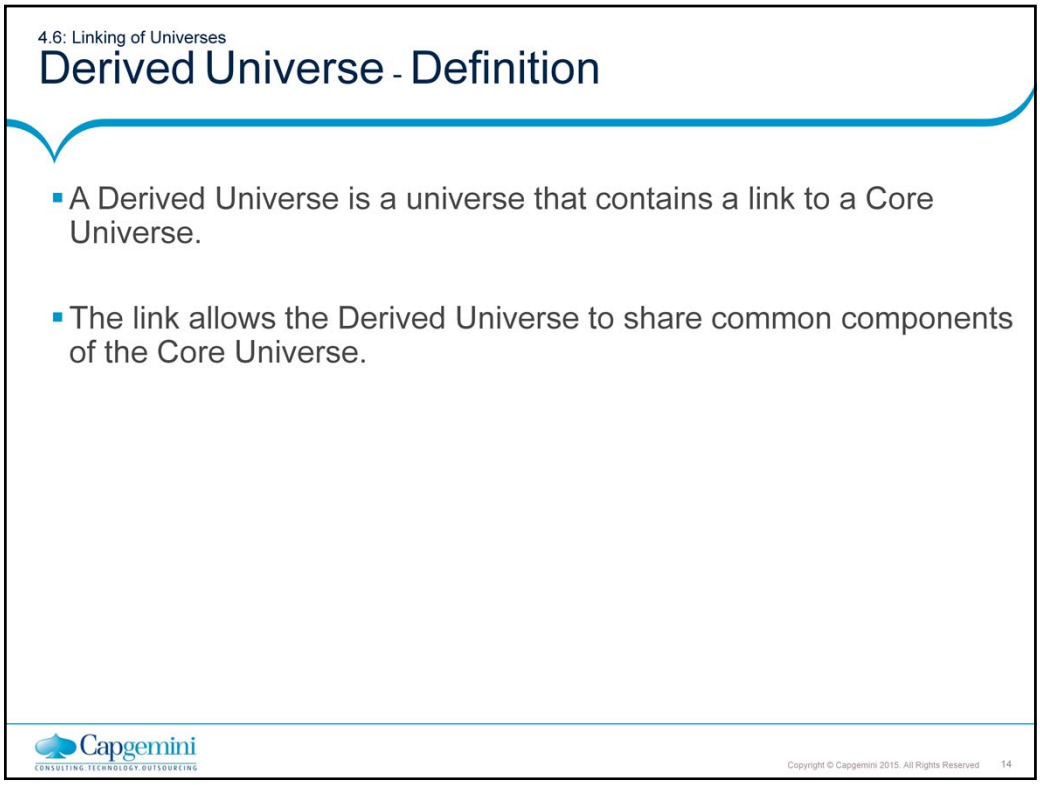
Linking of Universes:

- Linking a Universe is useful when a set of objects are common across multiple universes. When changes are made in the Core Universe, they are automatically propagated to the derived universes.
- A Kernel or Master Universe represents a re-usable library of components. Derived Universes may contain some or all the components of the Kernel or Master Universe, in addition to any components that have been added to it.

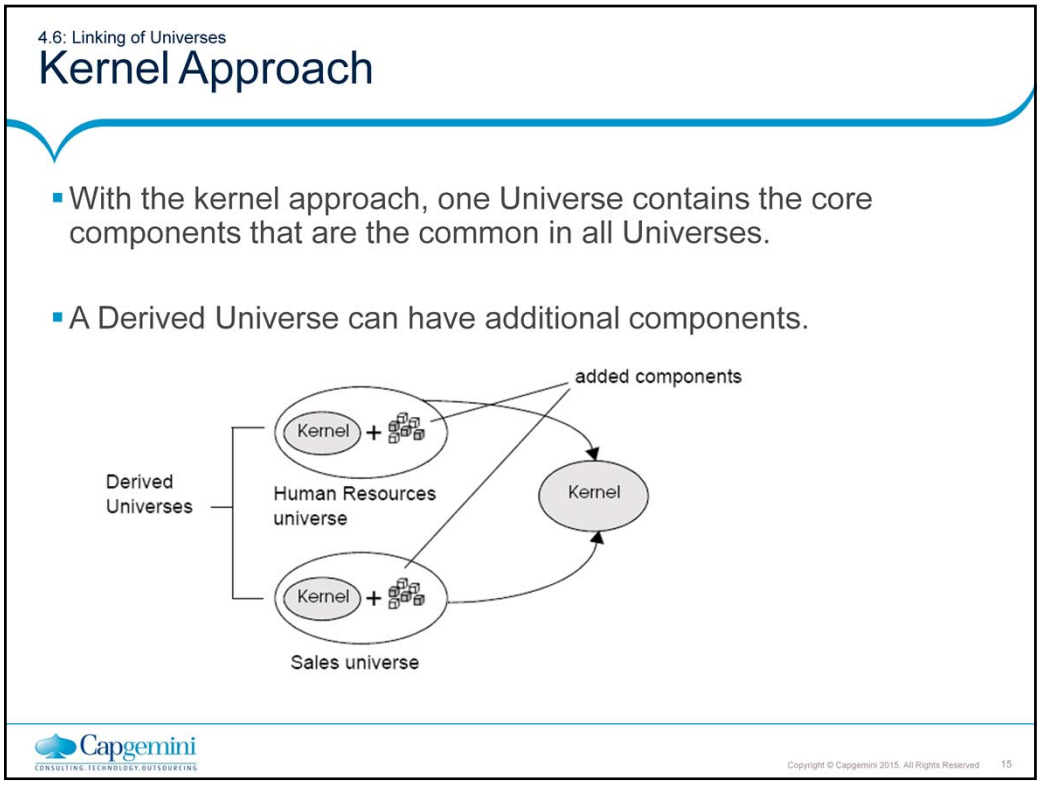


Core Universe:

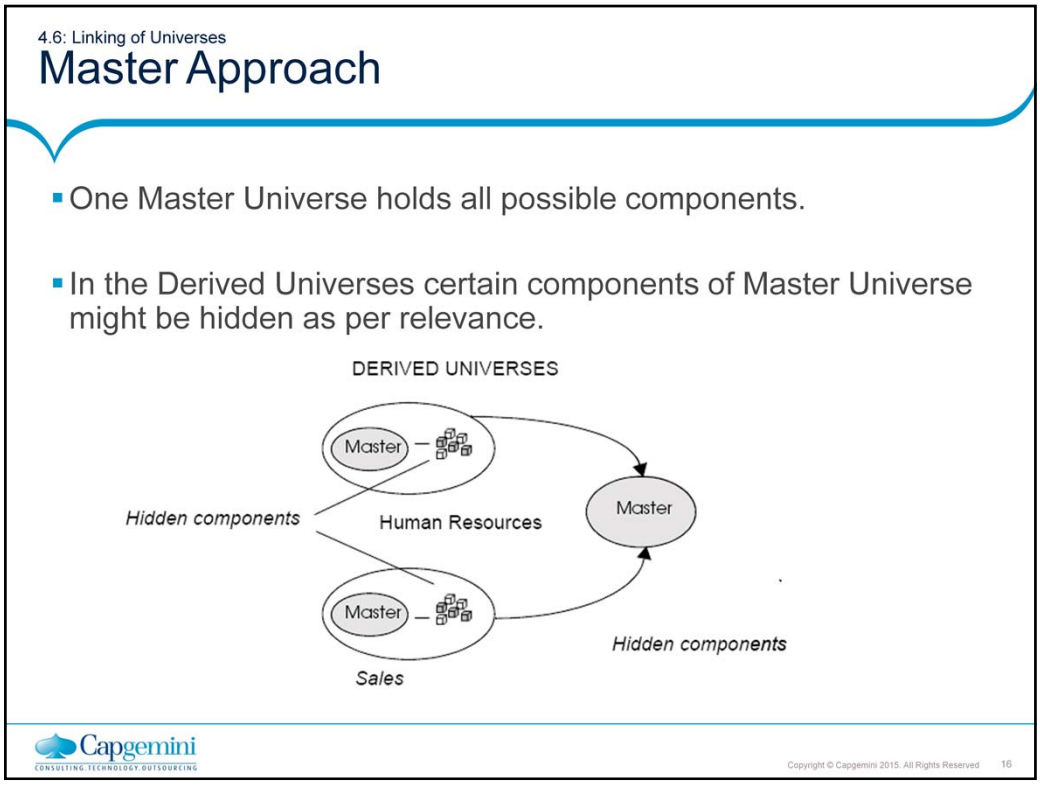
- A Core Universe contains a list of objects common to multiple universes. Once a derived universe is build using the core universe, all objects are made available in the derived universe.
- A Core Universe can be a Kernel or Master Universe depending on the way the Core Universe components are used in the derived universes.



Derived Universe:
After a Core Universe is built, a Derived universe can make use of the objects available in the Core Universe. The number of objects available in the derived universe depends upon the way the Core Universe is linked.



Kernel Approach:
The Derived Universes that you create from this Kernel Universe contain the core components as well as their own specific components.
For Example: The Human Resources Universe and Sales Universe are derived from a Kernel Universe. They contain core components of the Kernel Universe as well as their own specific components. Any changes you make to the Kernel Universe are automatically reflected in the core components of all the Derived Universes.



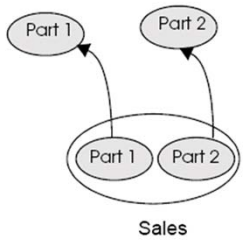
Master Approach:

- The Master Approach is another way of organizing the common components of linked Universes.
- The Human Resources Universe and Sales Universe are derived from a Master Universe. Some of the components may be hidden in the Derived Universe. Any changes you make to the Master Universe are automatically reflected in the core components of all the Derived Universes.
- The components visible in the Derived Universe are sub-set of the Master Universe. There are no components added in the Derived Universe.

4.6: Linking of Universes

Component Approach

- Component Approach involves merging two or more Universes into one Universe.
- It is used when each Universe is designed with limited functionality or keeping specialization in mind.



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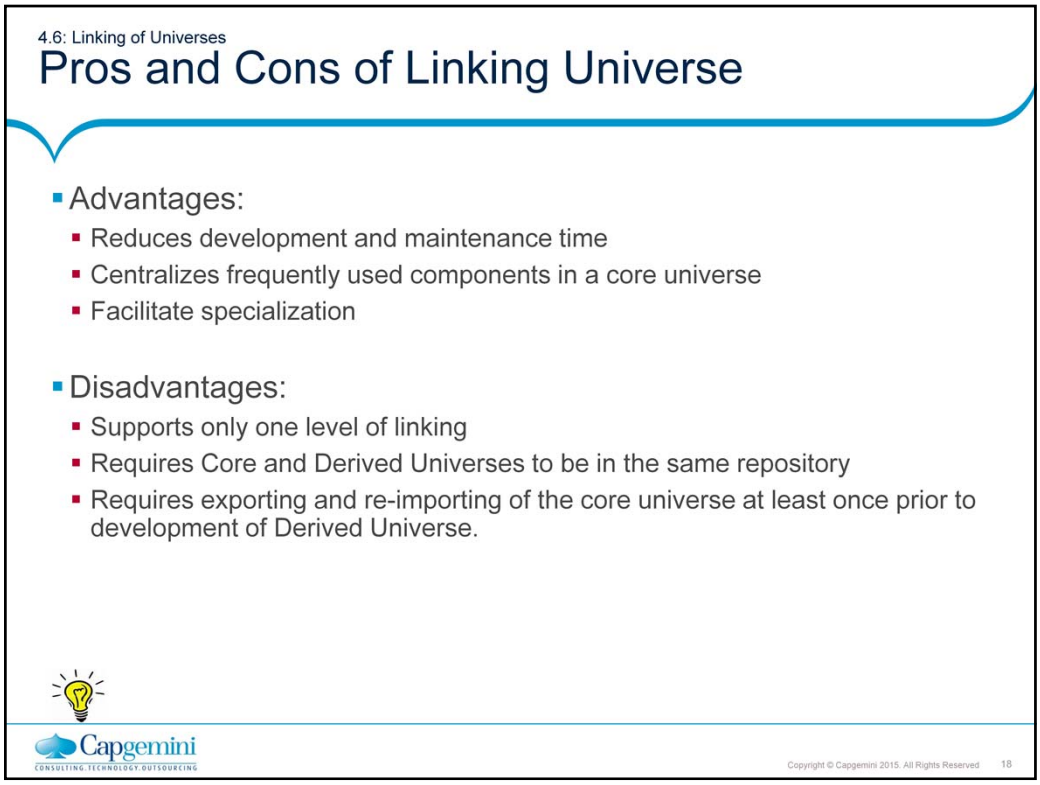
Component Approach:

- The Component Approach involves merging two or more Universes, allowing to combine the work of multiple Designers into a single new Universe.
- In the figure in the above slide, the Sales Universe was created by merging two Universes: Part 1 and Part 2.



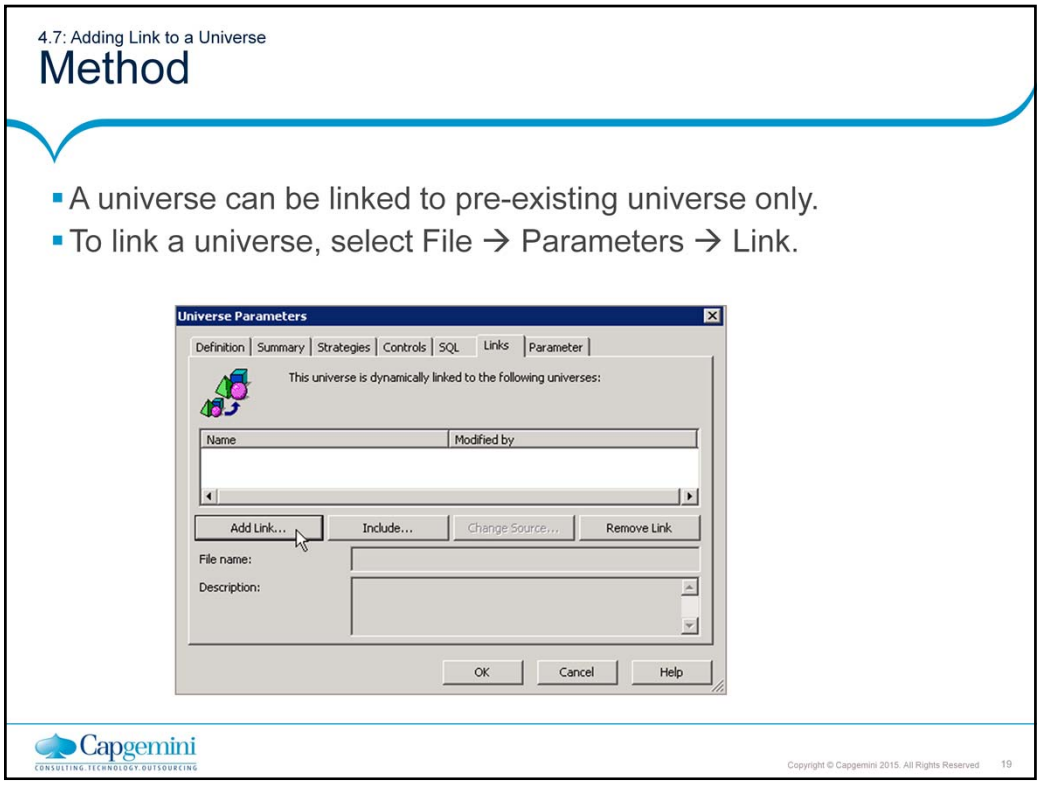
Pros and Cons of Linking Universe:

Advantages:

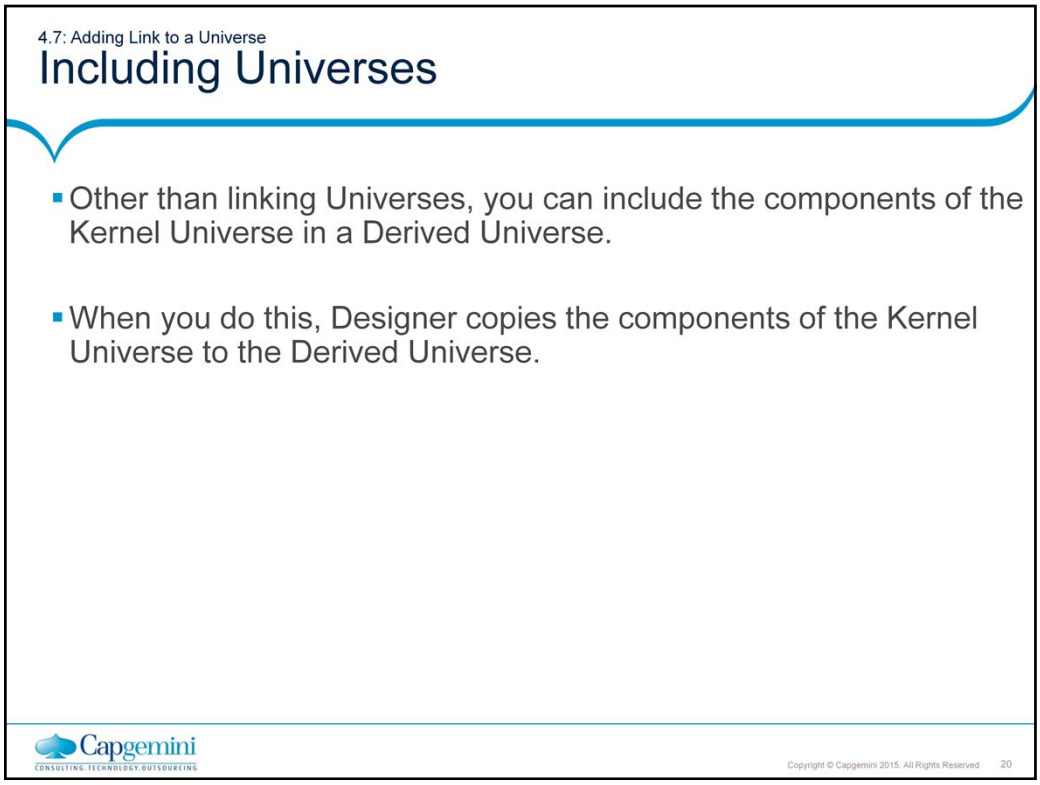
Linking of the Universe enables the developer to build a Core Universe with commonly used objects. It reduces the development and maintenance time of Derived Universe. A developer can even build the specialized universe specific to functional needs.

Disadvantages:

Only one level of linking is supported. One cannot create Derived Universe from an already Derived Universe. The Core Universe needs to be exported and re-imported prior to development of a Derived Universe.



Adding Link to a Universe:
In order to link a Core Universe, a developer needs to build a Core Universe, and export it.



Including Universes:

- The resulting components in the Derived Universe are independent of those in the Kernel Universe. Therefore, modifying a Kernel Universe has no effect on any Universes derived from it.
- You may decide to include one Universe within another for one of the following two reasons:
  - You simply wish to copy the contents of a given Universe into an active Universe.
  - You wish to end the dynamic link between two Universes.

4.7: Adding Link to a Universe

Demo on Linking of Universes

- Demo on linking the Universes

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Summary

- In this lesson, you have learnt:
  - Maintaining the existing Universes
  - Exporting and sharing new Universes
  - Linking of Universes

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Review Question

- Question 1: Master approach involves merging two or more Universes into one Universe.
  - True / False
- Question 2: ___ Universe represents a re-usable library of components.
- Question 3: You can distribute your Universe by publishing it to the corporate repository.
  - True / False

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