

migration project to so many human workers leaves the data migration project vulnerable to human errors.

[0004] Therefore, there is a need to introduce a more efficient data migration process that is able to utilize computing resources to take on a greater role in planning, validating and executing a data migration project.

SUMMARY OF THE INVENTION

[0005] According to an aspect of the present invention, a method of implementing a data migration project for migrating a set of application data from a source data storage system to a destination data storage system is disclosed, the method comprising: receiving, at a controller, a set of data migration rules; receiving, at the controller, a set of scheduling considerations; comparing the set of data migration rules against the set of scheduling considerations; grouping applications being executed on the source data storage system in a bundle unit, wherein the grouped applications are being executed on a common server, and the grouped applications share a common service; determining compliance of migration rules and the set of scheduling considerations for migrating the bundle unit based on the comparison, and generating a migration schedule for migrating the bundle unit while the applications are being executed based on the determination.

[0006] According to another aspect of the present invention, a workstation for implementing a data migration project for migrating a set of application data from a source data storage system to a destination data storage system is disclosed, the workstation comprising: a memory configured to store a set of data migration rules and a set of scheduling considerations; and a controller configured to: compare the set of data migration rules against the set of scheduling considerations; identify applications being executed on a common server and sharing a common service; group the identified applications and corresponding application data in a bundle unit; determine whether conflicts arise between

the set of migration rules and the set of scheduling considerations for the bundle unit based on the comparison, and generate a migration schedule for migrating the bundle unit while the applications are being executed based on the determination.

[0007] According to another aspect of the present invention, a computer readable memory storing a set of instructions for implementing a data migration project for migrating a set of application data from a source data storage system to a destination data storage system is disclosed, the computer readable memory including a set of instructions executable by a processor, the set of instructions including: instructions to store a set of data migration rules and a set of scheduling considerations; instructions to compare the set of data migration rules against the set of scheduling considerations; instructions to determine that the set of migration rules is compliant with the set of scheduling considerations based on the comparison, instructions to group applications on the source data storage in a bundle unit, wherein the grouped applications are executed on a common server, and the grouped applications share a common service; and instructions to generate a migration schedule for migrating the grouped applications in the bundle unit while the applications are being executed.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] The present invention may be better understood with reference to the following drawings and description. Non- limiting and non-exhaustive descriptions are described with reference to the following drawings. The components in the figures are not necessarily to scale, emphasis instead being placed upon illustrating principles. In the figures, like referenced numerals may refer to like parts throughout the different figures unless otherwise specified.

What is claimed is:

1. A method of implementing a data migration project for migrating a set of application data from a source data storage system to a destination data storage system, the method including:

- receiving, at a controller, a set of data migration rules;
- receiving, at the controller, a set of scheduling considerations;
- comparing the set of data migration rules against the set of scheduling considerations;
- grouping applications being executed on the source data storage system in a bundle unit, wherein the grouped applications are being executed on a common server, and the grouped applications share a common service;
- determining compliance of migration rules and the set of scheduling considerations for migrating the bundle unit based on the comparison, and
- generating a migration schedule for migrating the bundle unit while the applications are being executed based on the determination.

2. A method according to claim 1, wherein generating the migration schedule includes implementing sequential relationships between entities within the set of application data, and the method further includes:

- determining one or more data migration activities that correspond to an entity such that the entity is migrated according to the one or more data migration activities.

3. A method according to either claim 1 or claim 2, wherein the one or more data migration activities identify a set of instructions for migrating the corresponding entity.

4. A method according to claim 2, wherein generating the migration schedule includes identifying at least a start time and end time for a corresponding data migration activity.

5. A method according to any one of the preceding claims, wherein a migration activity script is generated for one or more of the applications within the bundle unit such that each migration activity script includes one or more migration activities that identify a set of instructions for migrating a corresponding application.

6. A method according to claim 5, wherein generating the migration schedule further includes implementing a sequence in which the migration activities within the migration activity script are to be accomplished.

7. A method according to claim 5, wherein generating the migration schedule further includes implementing a sequence in which the migration activities are to be accomplished for each migration activity script.

8. A method according to claim 7, wherein the sequence identifies dependency relationships between migration activity scripts such that a next migration activity in a second migration activity script cannot be commenced until a previous migration activity in a first migration activity script is accomplished.

9. A method according to any one of the preceding claims, further including:

- detecting whether a data migration rule or scheduling consideration is tagged with a precedence tag, and

- wherein the migration schedule is generated to implement data migration rules and scheduling considerations that have been detected to be tagged with the precedence tag.

10. A method according to any one of the preceding claims, further including:

- organizing the set of application data into one or more bundle units based on the set of data migration rules;

- identifying one or more stray application data not associated with any bundle units, and
- associating the one or more stray application data to one or more bundle units according to data migration rules implemented in the migration schedule.

11. A method according to any one of the preceding claims, further including:

- organizing the set of application data into one or more bundle units based on the set of data migration rules;

- migrating the set of application data according to the migration schedule;

- comparing the one or more bundle units against the set of data migration rules implemented in the migration schedule; and

- determining whether any of the one or more bundle units violate data migration rules implemented in the migration schedule based on the comparison.

12. A method according to claim 11, further including:

- providing an indication that identifies at least one of the one or more bundle units that violate data migration rules implemented in the migration schedule or the violated data migration rules implemented in the migration schedule.

13. A method according to any one of the preceding claims, wherein a data migration rule requires application data stored on a common data storage server to be included in a common bundle unit.

14. A method according to any one of the preceding claims, wherein a data migration rule requires application data related to a common shared service to be included in a common bundle unit.

15. A method according to any one of the preceding claims, wherein the data migration rules implemented in the migration schedule includes a move together rule identifying application data to be migrated together in a common data migration wave.

16. A method according to any one of the preceding claims, wherein the data migration rules implemented in the migration schedule includes a sequencing rule identifying an order in which application data, bundle units or data migration waves are to be migrated from a source data server to a destination data server.

17. A workstation for implementing a data migration project for migrating a set of application data from a source data storage system to a destination data storage system, the workstation including:

- a memory configured to store a set of data migration rules and a set of scheduling considerations; and

- a controller configured to:

- compare the set of data migration rules against the set of scheduling considerations;

- identify applications being executed on a common server and sharing a common service;

- group the identified applications and corresponding application data in a bundle unit;

- determine whether conflicts arise between the set of migration rules and the set of scheduling considerations for the bundle unit based on the comparison, and

- generate a migration schedule for migrating the bundle unit while the applications are being executed based on the determination.

18. A workstation according to claim 17, wherein the migration schedule identifies one or more migration activities and corresponding scheduling information for the one or more migration activities.

19. A computer readable memory storing a set of instructions for implementing a data migration project for migrating a set of application data from a source data storage system to

a destination data storage system, the computer readable memory including a set of instructions executable by a processor, the set of instructions including:

- instructions to store a set of data migration rules and a set of scheduling considerations;

- instructions to compare the set of data migration rules against the set of scheduling considerations;

- instructions to determine that the set of migration rules is compliant with the set of scheduling considerations based on the comparison,

- instructions to group applications on the source data storage in a bundle unit, wherein the grouped applications are executed on a common server, and the grouped applications share a common service; and

- instructions to generate a migration schedule for migrating the grouped applications in the bundle unit while the applications are being executed.

20. A computer readable memory according to claim 19, further including instructions executable by the processor to generate the migration schedule to identify one or more migration activities and corresponding scheduling information for the one or more migration activities.

21. A computer readable memory according to claim 20, further including instructions executable by the processor to migrate the applications in the bundle unit according to the migration activities.