

Resource History in PSNext 3.0

02/15/09 – Revision 1.0

This document, as well as the software described in it, is furnished under license and may only be used or copied in accordance with the terms of such license. The information in this document is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Sciforma. Sciforma assumes no responsibility or liability for any errors or inaccuracies that may appear in this document. No part of it may be reproduced or transmitted, in any form or by any means without the prior written permission of Sciforma. Copyright 2009.

Content

A -Introduction	3
B -Definition	4
C -Organization History	5
1 -Organization view.....	6
2 -Deactivating Organizations.....	6
3 -Reorganization.....	7
3.1 -Initialize reorganization.....	7
3.2 -Pending organization category.....	7
3.3 -Running reorganization.....	8
4 -Consult the Organization's history.....	9
D -Resources History	12
1 -Persons, Resources and Users.....	13
2 -Keep record of organization changes.....	13
3 -Initializing the "Organization History" field.....	14
3.1 -Upgrading from previous versions.....	14
3.2 -The Earliest Organization tree.....	14
4 -Consult Resources History.....	16
E -Conclusion	17

A -Introduction

Companies need to constantly evolve to adapt to internal and external organizational changes. The way a company is hierarchically structured as well as the positions of its individuals will follow these changes accordingly.

Either small changes (merging or splitting a single department) or whole reorganization changes can be managed by PSNext.

New capabilities are provided in PSNext 3.0 for a better management of these changes as well as the reporting related tools to consider historical information.

B - Definition

The main concept behind resource's history is to keep track of the different organizations a resource has been linked to during its existence in PSNext. Keeping track of this history is important for both the organization and the resource itself.

For instance a Project Manager might be interested in how much effort has been spent per organization. If any resource's underwent an organization change during the project's execution, the spent effort should be split accordingly.

This point gets a higher importance when the Financial Control would like to convert spent effort into actual costs since this conversion might be based on the organization's cost (valid for any resource within it) rather than on each individual resource cost.

C -Organization History

The organization represents the company's breakdown structure into departments, services or business units. The Organization tree is one of PSNext's backbones because of the strong dependencies that rely on it. Resources, users, permissions, availability, workflows, costs and many other elements are closely related to the organization tree.

Certainly, it is essential to keep record of all the different organization changes resources undergo. However since the company itself and its organization might also evolve, keeping record of organization changes is a fundamental aspect in resource's history.

It would be useless to know that a resource once belong to a given department or team if the organization doesn't exist anymore and there is no way to refer to it.

PSNext 3.0 provides organization history features and concepts to cover the main required aspects to manage resource history.

1 -Organization view

The organization is centrally managed by PSNext's administrator under in the Organizations view of the System component. The view is now provided with four tabs for organization management.

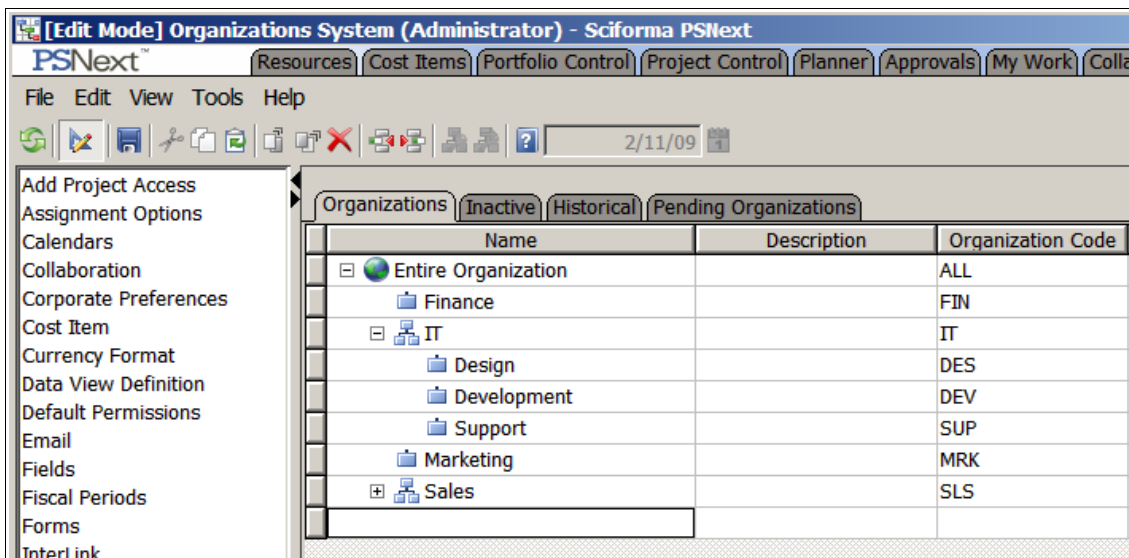


Fig 1. Four tabs are provided to manage the Organization tree

- **Organizations tab:** Displays the current organization tree. Branches can be created, deleted or updated in this tab.
- **Inactive tab:** Displays the inactive organizations
- **Historical tab:** Builds up historical organizations as of a given date
- **Pending organizations tab:** Prepares the organization's future structure to support reorganizations

2 -Deactivating Organizations

Organization branches are no longer deleted, they now become inactive and will remain available in PSNext so that the organization tree can be rebuilt when consulting historical data.

As soon as an organization branch is deleted in the "Organization" tab it becomes inactive and is listed in the "Inactive" tab. The values of all the fields that identified the organization will also be saved and can be referred later.

The inactive organizations are not outlined, the tab displays a flat listing of all the organizations that once existed in PSNext.

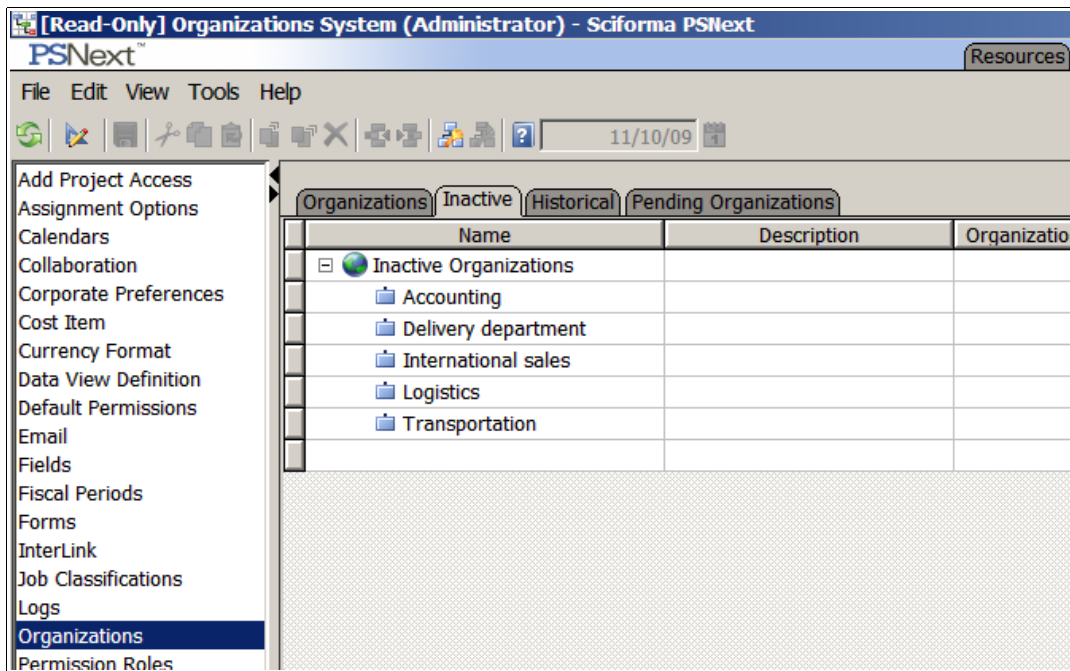


Fig 2. All the deleted organizations are displayed in the “Inactive” tab

3 -Reorganization

Reorganization is a PSNext tool that helps administrators to prepare and update PSNext when important organization changes take place in the company.

This tool has been provided in earlier versions and has been enhanced to support the new organization history capabilities.

3.1 -INITIALIZE REORGANIZATION

The Initialize Reorganization tool helps initialize the pending organization tree. The process will replace the pending organization tree by the current organization.

Additionally, the current organizations will be automatically mapped to their corresponding Pending Organization. Once the Pending Organization tree has been initialized the values of its fields and the structure itself can be freely modified.

3.2 -PENDING ORGANIZATION CATEGORY

Under System/Fields, the “Pending Organization” category now shares its field definition with the “Organization” category. A user defined field that is created in the “Pending Organization” category will automatically be created in the “Organization” category and vice-versa.

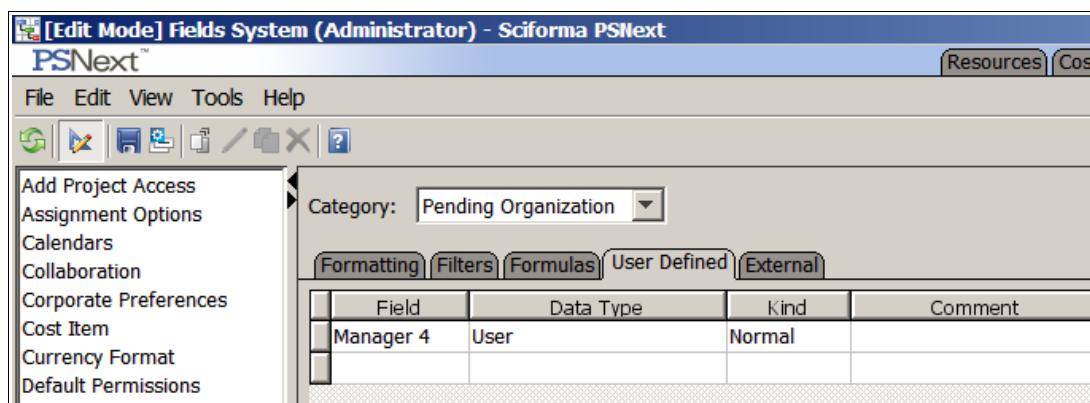


Fig 3. A user defined field of the "Pending Organization" category

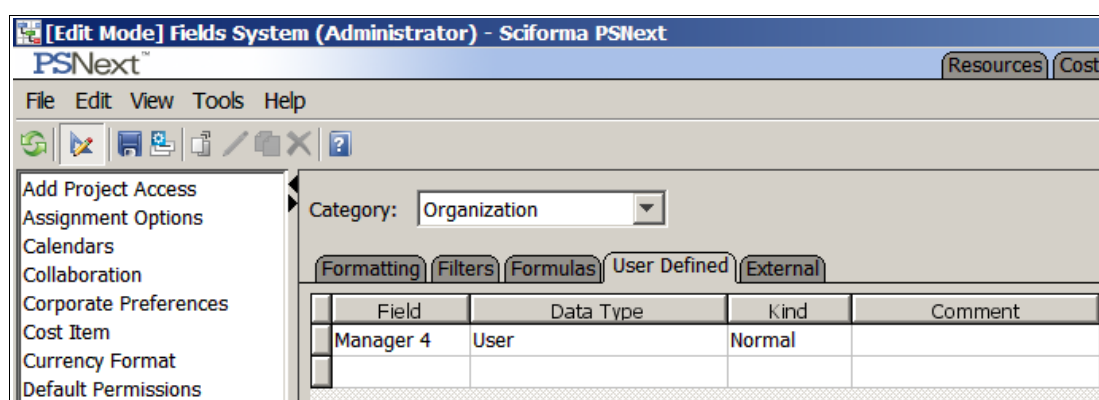


Fig 4. The "Organization category shares its fields definition with the "Pending Organization" category.

By using these tools, Administrators can better prepare the pending organization tree to a reorganization. All the field's values of a pending organization branch will be preserved when building up the resulting tree in the Reorganization process.

3.3 - RUNNING REORGANIZATION

The reorganization process itself will carry out a series of actions to map the current organization and its linked elements (resources, cost items, permissions, etc.) to its future structure.

PSNext 3.0 enhances two main changes in the Reorganization process:

- When more than one of the current organizations are mapped to a single pending organization (because the company's organizations have merged), when reorganizing, each of the current organizations will become inactive and a new organization branch will be created.

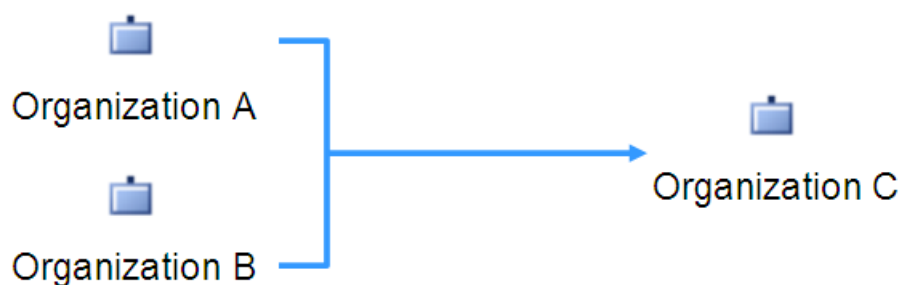


Fig 5. When two branches merge they will become inactive and the resulting branch will be created.

- If a pending organization is referred by a single organization branch, when reorganizing the current organization will not become inactive, only the fields of the pending organization will be copied into the current organization.



Fig 6. In a one to one mapping, only a copy is undertaken.

4 -Consult the Organization's history

The organization tree at a given date in the past can be directly consulted by the administrator in the "Historical" tab of the System/Organizations view.

The displayed organization tree is an image of the Organization tree as it existed on the selected date. Active and Inactive organizations will be used to build this tree up.

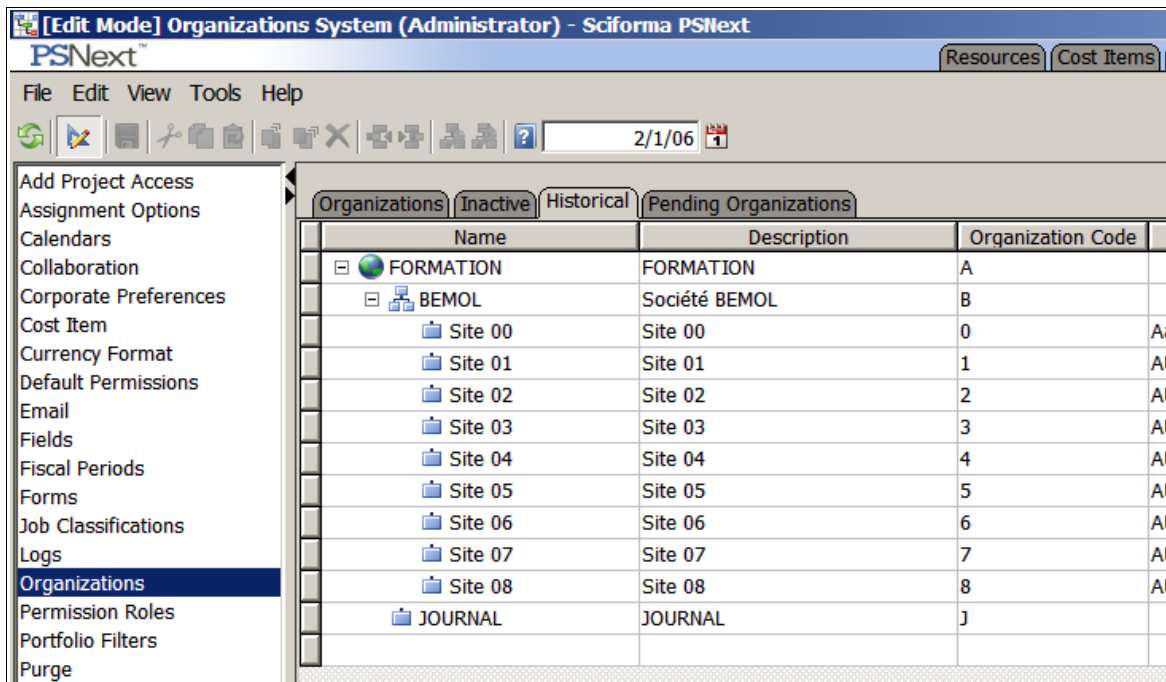


Fig 7. The historical tab builds up an image of the organization tree as of a given date

Additionally, a “historical organization” can be consulted in the Reports component. PSNext 3.0 provides a “Historical Organization” loop in text reports. The start date of the time distribution parameters of the loop is considered the “as of date” to be used to build the organization tree.

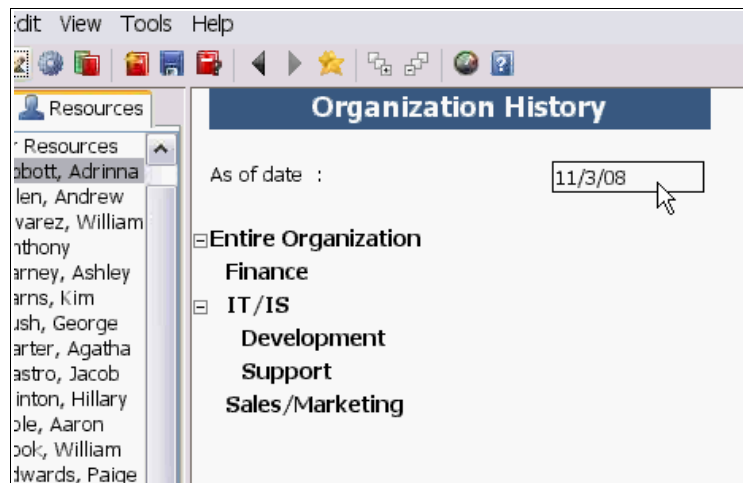


Fig 8. A report with the same capabilities than the “Historical” tab.

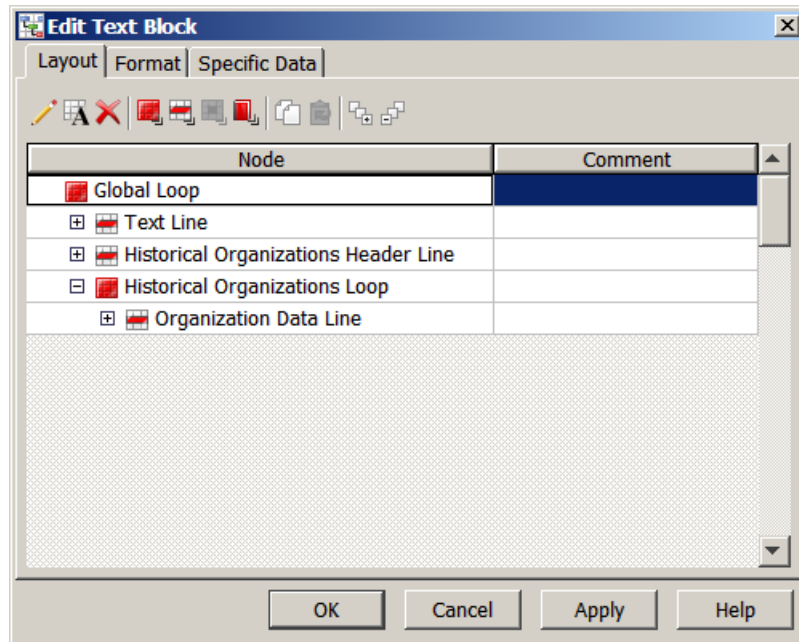


Fig 9. The “Historical Organization” loop is able to build up the organization tree as of a given date.

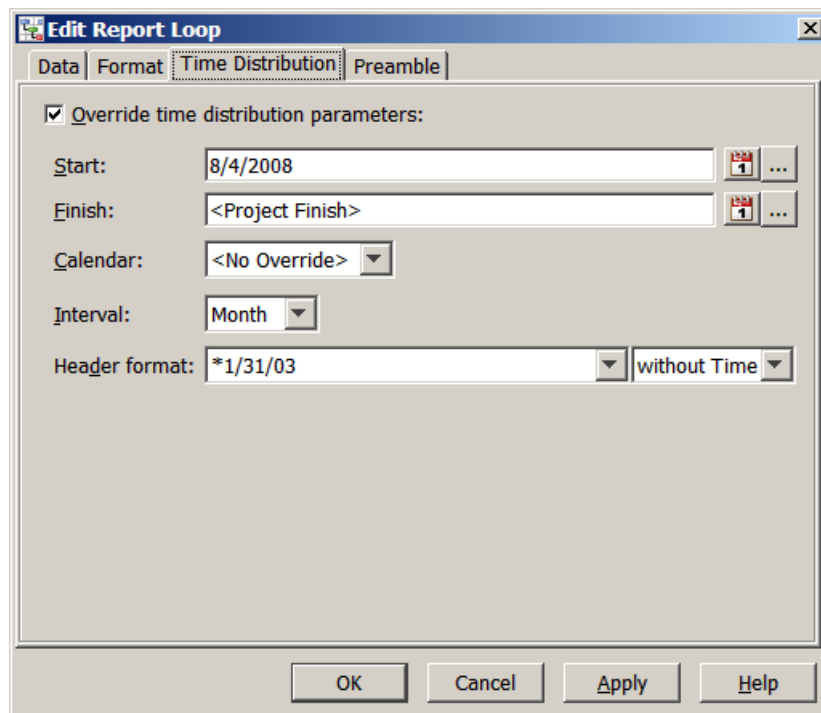


Fig 10. The “Start” date of the “Time Distribution” parameters is used as the “as of date”.

D -Resources History

1 -Persons, Resources and Users

Within PSNext, a Person (an individual) can be identified either as a user, as a resource, or as both. Resources are committed and assigned to projects while Users have credentials to access PSNext (with a login and password).

When a person is declared as a User and as a Resource, both elements have some attributes in common, especially the organization they belong to.

Different cases are possible and might impact a Person's history. A Person might initially be a User only and later become a Resource or vice-versa. PSNext will indeed keep the organization history of a Person so that history is preserved in every possible case.

2 -Keep record of organization changes

PSNext 3.0 introduces a new built-in field called "Organization History" in both the "Resource" and the "User" categories. This new field is a dated field that will keep track of all the organization changes a Resource or User might undergo.

As soon as the value of the "Organization" field changes, a new dated entry is automatically created in the "Organization History" field.

As any dated field, the content of this field uses a dated list with the related logged values (changes) next to each date.

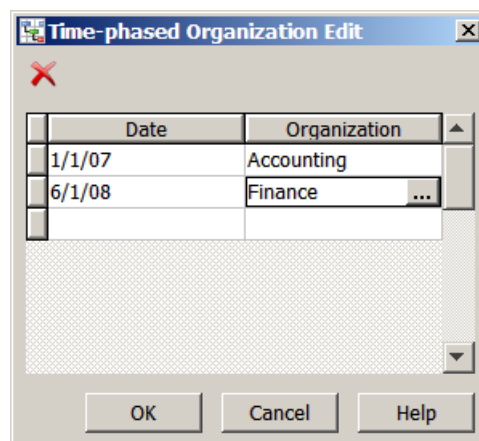


Fig 11. Organization history log of a Person

In the example above, the Person joined the company on January 1st 2007 and it belong to that organization until June 1st when the it joined the "Finance" team.

The details of the "Organization History" field can be consulted by bringing the field's dialog box (by clicking in the three dot button).

The values of the field can be directly edited to change an existing entry or to create a new dated entry.

For instance it might be possible that a Resource's organization change is keyed into PSNext at a later date than the date of the actual change. Maybe the Resource's Administrator was notified a few days later or maybe a Scheduled API would be updating Resources with a given frequency if changes were provided by an external system.

The resource history can only manage changes in the past and will therefore prevent users from entering an entry at a future date.

Administrators are strongly encouraged to restrict write permissions on the "Organization History" field.

Note that the available organization trees in the right of each date do not correspond to the current organization (today's organization) but to the organization tree "as of" the date of the entry.

3 -Initializing the "Organization History" field

The first dated record of the "Organization History" field corresponds to the date the resource or user was first created in PSNext.

There are three main ways to create a user or resource

- Manually enter the person in the User or Resource spreadsheet
- By importing an XML file
- By creating a user from an existing resource or vice-versa

When doing any of the above procedures, the "Organization history" field will get a dated entry on the creation date.

Note that the dated entries have a time precision. This means that if you change the organization value multiple times within the same day, all of those changes will be logged. When consulting data through reports, depending on the way the report is designed, it might consider the organization change the day after it was actually logged (ranges in reports start at 00:00 hours).

It is possible to edit the organization history log entries to set a better precision by manually typing a time after the date of the log or by selecting a date from the calendar (which will be considered at 00:00 hours)

3.1 -UPGRADING FROM PREVIOUS VERSIONS

When a database is upgraded from a previous version, an entry at the time of the database conversion will be created in the "Organization history" field saving the current organization.

3.2 -THE EARLIEST ORGANIZATION TREE

Administrators might be interested in creating an "Organization History" entry logging the current organization of every existing Person (Resource or User), on 1/1/1970 – PSNext's smallest valid date. The "History" can then begin being written since that date.

This can be easily done by defining the earliest known organization tree.

The earliest organization tree is created by the administrator out of the current organization. In fact the current organization is “saved as” the earliest organization tree by using the “Save as Earliest Tree” command in the File menu under System/Organizations.

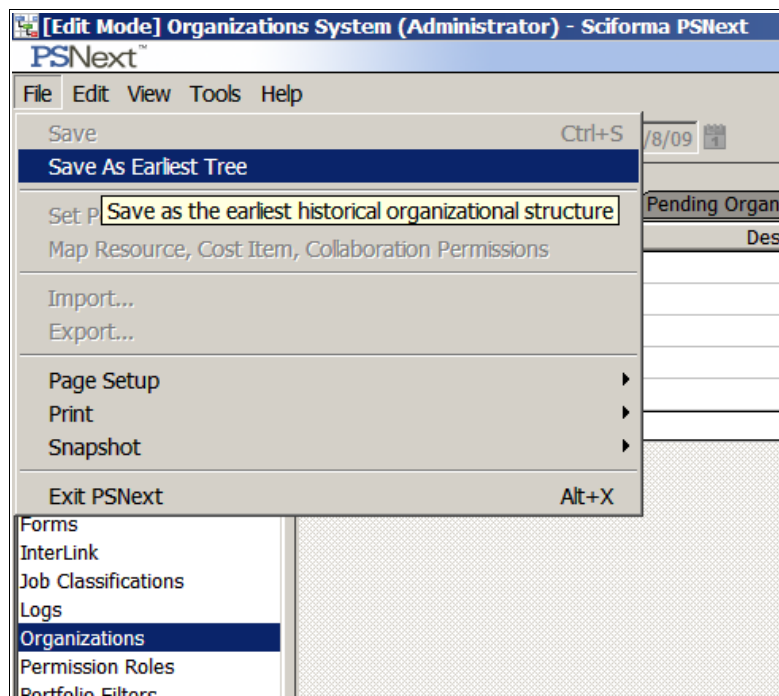



Fig 12. The Earliest Organization tree is the starting point of the organization's history

As a consequence of saving the earliest tree, all the existing “organization history” logs will be cleared for every Person as well as the known history of the organization itself. The “Historical” tab under System/Organizations will be reset.

 *It is strongly recommended that users that upgrade from a previous version save the earliest tree as soon as they upgrade.*

4 - Consult Resources History

As for organizations, the resources history can be easily used in reports. In general both dated informations will be put together to provide a real situation of the Resources in time.

The “Historical Organization” loop in text reports will build up a tree as of a given date. Based on that tree, the resources that were attached to each branch can be analyzed.

For instance it would be useful to display the organization tree at a given date and within each branch the list of its related resources. Further analysis could include the actual spent effort of each resource in time (distributed data).

		26 Nov 08	27 Nov 08	28 Nov 08	29 Nov 08	30 Nov 08	01 Dec 08	02 Dec 08	03 Dec 08	04 Dec 08
Abbott, Adrinna		IT/IS	Finance	Finance	Finance	Finance	Finance	Finance	Finance	Finance
Irving, Emily			Cole, Aaron	Cole, Aaron	Cole, Aaron	Cole, Aaron	Cole, Aaron	Cole, Aaron	Cole, Aaron	Cole, Aaron
			\$8.00/h	\$20.00/h	\$20.00/h	\$20.00/h	\$20.00/h	\$20.00/h	\$20.00/h	\$10.00/h

Fig 13. The organization tree as of a given date with its related resources.

Note that the organization itself could have some dated fields in its definition, such as its Cost. These dated values (built-in fields or user defined) can also be used when referring to a historical organization. A resource might have been part of an organization and while still being part of it, the cost of that organization changed.

E -Conclusion

Organization and Resource histories are closely related and require a common approach to be managed.

PSNext 3.0 enhances Organization history to keep record of every change the organization tree might undergo. By preserving deleted branches, manually or as a consequence of a Reorganization process, it is possible to rebuild an image of the organization tree at any past date.

In parallel, any known person by PSNext, either as a User or a Resource will keep the history of the organization changes that it might suffer.

Reporting tools include an easy way to consider this history to provide accurate information when studying time and organization related data such as costs, effort, and availability.