nebt

Portable Content Management Platform



NE5T.com is an online platform for effective knowledge art management in a complex environment of art market. You can think of NEST as a web enabled system for the management of art and exchange of concepts, platform where galleries, artists, curators and researchers can present work, enter into collaborative media experiments, and play with the meaning of media objects. The portal has advanced tools that serve to search and visualize direct and latent relations between people, groups, events, projects, places, institutions and fields of art and culture. These relations are presented and visualized by labeled multi-graphs. Therefore we have different types of links, what permits to build hierarchies and semantics.

Graphs are in our approach very important, because they provide a precise method of representing relations between objects from database as well as a manual, flexible interface for users. The software allows for example to track the actions of chosen artists or groups, map their concepts and artworks and events which they participated and to find automatically relations with galleries, institutions, art spaces, that are not visible at the first sight. All information about relations are automatically infered from database.

The platform is presented as a portal where are applied innovative tools that allows a cooperation in the domain of cultural and social exchanges.

1. USERS. The portal supports groups of agents (human and artificial) in order to represent, mine, and exchange cultural data. The users of the portal are as follows:

- galleries
- curators and artists
- activists and members of government and non-profit organizations

2. CONTENT. The content of the database is created and developed by users of the portal:

- specialists i curators of contemporary art and digital culture
- galleries

3. COOPERATION. The portal allows a cooperation between users: communication, creation of groups and subgroups as well as work on common projects. There are also tools that show activity and information transfer between users.

4. SEARCHING. An advanced search engine permits a fast, effective and very precise finding of information concerning art creators, their activity and relation with other groups, events and domains.

5. ANALYSIS OF LATENT SEMANTIC RELATIONS. The portal provides an analytic software to automatic finding of direct and latent relations between people, groups, events, places, institutions etc. The software allows for example to track the actions of chosen artists or groups, map their concepts and artworks and events which they participated and to find automatically relations with galleries, institutions, art spaces, that are not visible at the first sight.

All information about relations are automatically infered from database. We applied tools to statistical analysis of databases and a special methodology based on Formal Concept Analysis that serves to categorize data and infer new data [please see sites for find info about our t datamining toolkit L-MINER]

6. VISUAL REPPRESENTATION We use advanced graph methods to visualize, that allows effective work with large databases. Graphs are in our approach very important, because they provide a precise method of representing relations between objects from database as well as a manual, flexible interface for users. The relations between objects are represented by labeled multi-graphs, in which we have different types of links, what permits to build hierarchies and semantics. We use the multi-graphs where in nodes you can find objects as artworks, people, events, places, groups, expertises etc. and links in the graph represent relations between objects.

7. PORTABILITY. The portability consists on adjusting our portal possibilities to the individual needs of galleries and institutions. Different galleries may have different types of data, different needs and aims. We propose portlets [mini applications based on the core of portal] that can be adjusted to the individual needs of galleries. It is possible to integrate portal with a database of other institutions for example. A database of institutions that finance artistic project.

8. ACCESS. The are several types of access to database:

- access to the knowledge and analytic tools useful for specialists
- access too general information to wide public

9. CONTEXT. The context in which our portal can be located are such projects as rhizome.org or neural.it. The proposes of these projects are maybe similar but the methods applied in our portal are much more advanced. NEST uses labeled multigraphs, it means different types of links and possibility to build hierarchies and semantics.

10. ARCHITECTURE. The portal NEST based on FACE. Free Art Concepts Environment is Portable Knowledge Management Environment. Please see details: <u>http://freeconcept.net/</u>

11. Technical details - database MySQL v. 5.0.2

- server Tomcat 5.5 with Java 1.5 & PHP 5.2
- operation system Windows, Mac OS X, Linux, Unix
- general, consistent and flexible core of application

graph algorithms

client application html + java applet

13. What can you do in NEST?

1. search in order find relation between people, groups, events, expertise, objects/ projects and localizations,

2. make contribution: edit and publish own documents,

. edit and publish own graph/map of relations between people, groups, events, expertise, projects and localizations

. upload, download sources

3. browsing, evaluation or criticizing of other users' contributions, make messages and participate in discussions

. make messages and participate in discussions

Nest **search** engine users get access to complex information about art and culture world. The search engine helps to finds links between people, groups, events, expertise, objects/ projects and localizations. Nest users get the opportunity to present parts of their graph. The presentation is based on a clear graphic interface that allows to access to complex information about presented objects Nusers get an opportunity to make contribution: edit and publish own documents, describe objects and review other users' graphs. Specialists can exchange views and criticize many phenomena in this domain, as well as compare it to other users opinions.



NEST is also a classic society application, supporting contacts and exchange between users. In this case, according to information published in the Nest profiles, users can find friends with similar preferences and interests. The NEST society also creates an unusual network, informing about important places and events in the art world: date of shows, openings, information about exhibitions and addresses of galleries. To work with Graph, to make contributions you will need to register as a user, or as we say, as an NUser (N here can mean Nest, Nest of concepts, Nest of galleries, artists and specialists etc).

You are an NUser if you were accepted by any member of NEST Council. If you have agreement from NEST Council you become a NUser simply by registering and giving yourself a Handle, like

you would do when signing in for an e- mail account. The details that you write about yourself create an FUser Profile - where visitors and other FUsers can find out what you want people to know about yourself. As your participation in NEST grows, this page will also feature links to the Projects and experiments that you initiate or contribute to.

Becoming an NUser gives you access to certain other privileges as well. You get regular updates on what is new in NEST.

13. 2. Types of data:

- People
- Groups
- Events
- Objects
- Places/Localizations/

• **People:** profile of a person, bio data, teleaddressing data, photo, url, description (short ad long), etc it allows to check info about person and people whom that person associates with

• Groups: the group that people are affilated with: galleries, organizations, institutions

• Events: significant events that they participated in: art fairs, openings, conferences, info about: title, place, url, description, and also makes some comments, crititics, review, impressions, reports t

- Objects: projects, documents, codes, movies etc
- Places/Localizations: cities, countries etc



14. Searching and analyzing relations

NEST enables to analyze following relations: People x Events People x Groups Groups x Events Events x Objects

People x Events address the question of "How are events related through people?". Queries:

How are events related through people? How are events related through groups? How are events and/or groups related through people? Is there a relation between expertise and group? How is expertise distributed through the events? How are people related through groups an/or events?



In addition, user ca construct the following relations, including some unioned relations, Groups x Events People (Events u Groups) Expertise x Groups People x (Events u Groups)
Expertise x Groups
People x (Groups u Expertise)
People x (Events u Expertise)
People x (Events u Groups u Expertise)
People x Objects
People x Localization
Expert can specific people [artist/galleriest], their actions and how they are involved and with whom they associte?
Latent association is a implication that two elements [e.g. people names] are potentially related via other elements, but direct evidence for the association is not present in start documents
How to work with search engine?
P1. define question e.g. is there a relation between events?

- P2. create model objects /attributes based on available data P3. INPUT. assembly approciate data for input
- P4. generate Graph
- P5. Analyze Graph & implications [visually]
- P6. change question



15. My NEST

In **My NEST** users get an opportunity to **make contribution: edit and publish own documents,** describe objects and review other users' graphs. Specialists can exchange views and criticize many phenomena in this domain, as well as compare it to other users opinions. NEST is also a classic society application, supporting contacts and exchange between users. In this case, according to information published in the N profiles, users can find friends with similar preferences and interests.

My NEST Create New [people, group, events, object, localization] Upload My Mail My Calendar Invite Forum Preferences



NEST	My Calendar	vocento
eate	Forum	
load	Invite	
/ Mail	Preferences	
nest NestCre	ate Person	
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Groups: Web page I Address:	JRL: Street: Location:	[add]

NUser can see and edit own contributions in **My Nest** area.

NUser can create own contributions/ own documents in Create area.

NUser can make new contribution [publish own documents] in Create New area.

NUser can upload own data in Upload area.

NUser can see messages in My mail area.

NUser can invite other people to see own contributions in **Invite** area.

NUser can make appoitments in My Calendar area.

NUser can use **Forum** to discus some topics.

NUser can change her/his email address or password in **Preferences** module.

NEST	My Calen	dar	vocento	_			
ate	Forum						
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asdasdasd		admin	2009-04-22 01:24:34	[-]			
Please see	the film 'film1'	admin	2009-03-23 23:52:45	[-]			
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Please see	the film 'film1'	admin	2009-03-23 23:50:12	[-]			
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<u>CO</u>			Create	Forum	
ma	Search connection		Upload	Invite	
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1 to 7 of 7					
discussion topic		Comments	Started by	Last comment by	Last Active
Dyskusja w innej kategorii		1	admin	admin	Sep 14th 2009
jestem nowy na tym forum		6	szatan	admin	Mar 23rd 2009
czyste zlo		2	szatanskiescierwo	admin	Mar 15th 2009
TEsting		2	test	test	Feb 12th 2009
Paraconsistent logic		1	gr0g	gr0g	Feb 10th 2009
VC		1	gr0g	gr0g	Feb 10th 2009
		3	admin	admin	Feb 9th 2009
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NEST is also a classic society application, supporting contacts and exchange between users. In this case, according to information published in the Nest profiles, users can find friends with similar preferences and interests.

Download

Downloading is possible from the Source place. You can choose to download the file or multiple files in a compressed format, .zip or .tar.gz etc.

Upload

You can upload files in the NEST Domain using the NEST web-based upload interface.

Basically this is done by transferring files to the NEST server by FTP.

Important : 3 Things to keep in mind while Uploading

1. Write a short and a long description of what you want to upload. The short description should not be more than 150 characters long. The long description can be as long as you like.

2. Choose or write 5 Keywords that best identify your project (the keywords should avoid words that denote formats, such as 'video', 'images', 'sound' or 'text'. Avoide dashes, slashes, pluses,

colons, semi-colons, punctuation marks, diacritics, numerals and other non-alphabetical symbols like asterisks, the @ sign, ampersands, etc.

3. Select your file. File sizes should not be above 15 MB The NEST system recognizes a lot of files by mime-type and we support the handling of files.

nest Nest View 188

<< back

XXX

File: http://nest.civ.pl/nest/file.php?id=188 Download Share

Mime type: video/quicktime (read about this type)

Size: 2.942 MB

Description: xxxx

Tags: art lisek



Here is a list of mime-types supported by NEST: JPG GIF LaTex Sourcefile, .latex Mac BinHex file, .hqx Mac Stufflt Archive, .sits maker file, .frm, .maker, .frame, .fm, .fb, .book, .fbdoc Microsoft Excel Document, .xls Microsoft Office Document', .doc,.dot Midi audiofile, .midi, .mid mif file, .mif MP2 audiofile, .mp2 MP3 audiofile, .mp3 MPEG audiofile, .mpga, .mpega MPEG video file, .mpeg, .mpg, .mpe MS-Dos Application, .exe, .bat, .com Object file, .o OGG-Vorbis audiofile, .ogg PBM anymap file, .fh4, .fh5, .fhc PBM bitmap file, .pbm PBM graymap file, .pgm

PBM pixmap file, .ppm PGP Signature, .pgp Plain Text file, .txt PNG image, .png PostScript document, .ps,.eps Postscript font, .pfa, .pfb, .gsf PowerPoint Presentation, .ppt Quicktime movie file, .qt, .mov RealAudio file, .rm, .ra RealVideo file, .rm Rich Text Format document, .rtf' Rich Text Format document, .wpd, .wp5' Richtext file, .rtx Shellscript, .sh' Shockwave Flash source file, .fla Shockwave movie, .dcr, .dir,. dxr Shockwave-Flash movie, .swf, .swfl StarOffice StarWriter document, .sdw, .sxw Tab seperated Values, .tsv VRML world, .vrm, .vrml, .wrl WAVE file, .rm, .ra Windows bitmap image, .bmp WindowsMedia audio file, .asf WindowsMedia file, .rm X11 portable font, .pcf, .pcf.Z Zip Archive, .zip

16. Visualization:

The graph that connect people, events, groups and places will be generated organically by NEST, through the recognition and meaning connections of the keywords that accumulate around media objects. the system of Visualization is based on the multi-graphs.

The Visualization is a graph space where types of icons represent:

- People **P** yellow
- Groups G orange
- Events E blue
- Objects/ Projects O green
- Localizations/Places L magenta



16. How does the visualization work?

NEST uses an statistical and graph algorithm to compare keywords to each other and uses the result of this to further position the relationships between the nodes in the graph and relationships between nodes as weighted edges.

17. Categories:

All Contributions have to be tagged with Categories that describe general classes that its will be included. This is important form of organizing knowledge. The list of categories is open and is still updated concerning statistical information about usage of Keywords.

18. Keywords and Descriptions:

All Contributions have to be tagged with Keywords that describe their contents. The keywords may tend towards precise definitions, they may be imaginative, but we recommend that people keep their keywords free of un-intended ambiguities. The keywords link the Contributions through a cross referencing mechanism, and are also part of the database that enables keyword searches

for all media objects, and texts within NEST. NUsers have to also write a brief as well as an extended description of all the media objects that they added within NEST.

19. What goes into NEST?

Media and Formats

NEST is able to receive five different types of media objects in a variety of formats. Media objects are colour coded.

The types of media, their formats and their respective colour codes are as follows : source code/software - white - (compresed as zip, tgz, tar, gz, etc VRML, HYPERLINK, SOURCEFILES. ...) visual material/image - yellow - (JPG, GIF) movies - red - (MPEG, AVI, MOV, RM, divX, SWF) visual material/image - yellow - (JPG, GIF) movies - red - (MPEG, AVI, MOV, RM, divX, SWF) audio - magenta - (OGG, MP3, WAV, RAM, ...) texts/research papers - green -(PLAIN TEXT, ASCII, RTF, SDW, SXW, DOC, ...) other - blue -(xxx) NUser can transform sources using following free software: Image Manipulation - GIMP Sound Editor - Audacity Word Processing - Open Office 1.0 **VRML** Animation - Open VRML 3D modelling - Blender PHP Programming etc.

20. The NESTDevice

NEST uses different statistical methods which can give useful information about users e.g.: This profile gives statistics and information on : How many NUsers have participated in the entire system, in the entire s record The NUser who does the maximum number of uploads The NUser who does the maximum number of downloads Which Contributions the NUser initiated Which Contributions the NUser is involved in Which Contributions the NUser created Which sources the NUser downloaded Which is the most downloaded Source

21. Managing User Access

To use NEST, you must have a user account in the NEST database. User accounts have different levels of access to the software, depending on the role assigned to the account and the groups to which the account belongs.

This chapter explains the function of user accounts, roles, and groups, and explains how to manage them using the NEST User Management tool. Read this chapter if you are responsible for creating or modifying user accounts or if you want to understand the privileges associated with your account. Read the section on passwords if you need to change your password.

Your own user account must have the Local Administrator role for you to use the User Management tool.

21.1 Understanding User Accounts

A user account provides access to the NEST. The user account specifies the user's login name and password and defines the user's level of access to the software. When you create a user account, you must assign it a role. The role determines the tasks the user can perform using the software. For more information see Understanding Roles below. You can also add a user account to one or more groups. Users in the same group have access to each other's objects. For more information see Understanding Groups below.

Each user account has a default folder in the NEST Navigator, with several default subfolders. The user's default folder and subfolders cannot be deleted, renamed, or moved. However, each user can create additional folders underneath the default folders.

A user called System Admin is created automatically when NEST is installed. The System Admin user has the Local Administrator role and is used to create other user accounts. The System Admin account cannot be edited or disabled, but the default password can be changed.

A user account once created can be made inactive. An inactive user account cannot have a role and cannot be assigned to a group.

21.2 Understanding Groups

A group is a collection of user accounts. The members of a group have access to each other's objects; for example, they can open each other's contributions. If users belong to more than one group, they need only one group in common to have access to each other's objects. For example, if user Bob belongs to Groups A and B, while user Susan belongs to Groups B and C, both Bob and Susan have access to each other's objects because both are members of Group B.

The level of access a user has to another user's objects is determined by the user's own role. For example, if Bob has the Standard User role, he can open and execute Susan's contributions. If Susan has the Expert User's role, she can open, execute, modify, copy, move, or delete Bob's experiments. See the next section for more information about roles.

21.3 Understanding Roles

Each user account is assigned one and only one role. The role determines the user's privileges. There are four roles:

- Standard User
- Expert User
- Administrator

Roles cannot be created or deleted, but certain access privileges can be enabled or disabled for each role. For more information see Working with Roles below.

21.3.1 Privileges of the Standard User Role

A Standard User has limited access to the NEST. A Standard User can do the following:

- See selected the expert's objects.
- Open or copy objects, and execute macros owned by a Local Administrator.
- copy and print selected objects
- A Standard User cannot do the following:

•Use the Create new window to create contribution from scratch or to refine experiment programs.

- Add comments to contribution.
- Use the device toolbar to modify contribution settings, such as program or color compensation.
- Modify or move objects belonging to other Experts.
- View folders or objects belonging to users who are not in the same group as the Standard User.
- Delete, move, copy, or rename default folders (including the user's own default folders).
- Delete any object (including the user's own objects).

21.3.2 Privileges of the Expert User Role

An Expert User can do the following:

• Use the My NEST module to make contributions.

• Create all other objects and open, copy, execute, modify, and move any of the own objects.

Adding an analysis to the contribution.

• Delete own objects and nondefault folders, if enabled by the Administrator.

•Open, copy, and execute objects owned by the Administrator .

•Open, copy, and execute objects owned by other Expert Users, if the other experts are in the same group as this user.

An Expert User cannot do the following:

•Create, delete, move, modify, or rename objects belonging to the Administrator,.

• See the folders or objects belonging to Standard and Expert Users who are not in the same group as the user.

• Delete, move, copy, or rename default folders (including the user's own folders).

21.3.3 Privileges of the Local Administrator Role

A Administrator can do the following:

• Use the Run programming module to make contributions.

• Create all other objects and open, copy, execute, modify, delete, and move any of the user's and expert's own objects.

• Open, execute, and delete items.

• Create, open, copy, execute, modify, delete, and move objects in folders belonging to Standard and Expert Users.

21.4 Managing Users, Groups, and Roles

The User Management tool allows you to

• Create, modify, enable, or disable user accounts.

• Assign roles to user accounts and change role assignments (you cannot create, modify, or delete roles).

• Create or delete user groups and assign users to groups.

You must have the Local Administrator role to use the User Management tool.

21.4.1 Working with Users

To create a new user account:

A default folder for the new user is added to the Navigator, and the user name is added to the list of users in the \Administration\Users folder in the Navigator. In the example above, four user accounts and two groups are listed in the Navigator.

The user accounts are Admin User Amy Clayton Robert Lisek System Admin Note that each user account has its own user folder. The groups are Lab1 Lab2 Gall3 In the User Management Tool, click Work with Users (if not already selected). Click New User. Enter the user's full name, login name, and password and select a role for the user. Check each group you want to add the user to. If no groups have been created, you can add the user when you create the group.

Click Done.

To edit, enable, or disable a user account:

To delete a user account:

In the User Management Tool, click Work with Users (if not already selected). Select the user's name in the right pane, then click Edit User. Change any of the user fields as needed. If you selected System Admin, the only information you can change is the password. To disable the user account, select the Access Disabled check box; to reactivate a disabled account, clear the Access Disabled check box. You cannot disable the System Admin account.

When finished, click Done.

Disable the user account you want to delete as described above.

Right-click the disabled user in the Navigator and select delete to empty the folder, if the folder contains objects.

Select the user's name in the User Management Tool and click Delete User.

21.4.2 Working with Groups

To create a new group:

The group is added to the Groups folder in the Navigator.

In the User Management Tool, click Work with Groups.

Click New Group.

Type a name for the group in the Group Name box.

To add users to the group, check the names of the users you want to add.

(You can create a group without adding users.)

Click Done.

If you did not add users to the group, a message asks you to confirm saving the group without users. Click OK.

To edit a group:

To delete a group:

In the User Management Tool, click Work with Groups.

Select the group name in the right pane.

Click Edit Group.

Change the group name or select and deselect members of the group. You can also assign a group to a user when you edit the user account. See Working with Users above.

Click Done.

In the User Management Tool, click Work with Groups.

Select the group name in the right pane.

Click Delete Group. You are prompted to confirm the deletion.

Click Yes to delete the group.

21.4.3 Working with Roles

You cannot create or delete roles, but you can change a user's role assignment. You can also modify certain of the access rights associated with the Standard User, Expert User. You cannot modify access rights of the Administrator role. You can also determine the time when a user is automatically logged off and determine the maximum login attempts before access is disabled on entering an invalid password.

To change a role assignment:

In the User Management Tool, click Work with Roles. Roles are displayed in the work pane. Click the + next to a role to display a list of users assigned to the role.

To change a user's role, select the user's name, then drag the user name to a new role. Click Done.

You can also change a user's role assignment when you edit the user account. See Working with Users above.

To modify a role's access rights:

In the User Management Tool, click Edit Access. The access window displays the available

options. Initially, all options are selected.

In the Logout on Inactivity area, enter a value in the Minutes of Inactivity before Auto-Logout box or keep the default. Deselect the Enabled box to disable the Auto-Logout function.

In the Disable Access on Invalid Password area, enter a value for the Maximum Login Attempts or keep the default. Deselect the "Enabled" box to disable this function. Exceeding the maximum login attempts blocks the access to your account. Contact your system administrator.

Enter a value in the Password expiration days box or leave the default. Select or deselect access rights for each role.

In the User Management Tool, click Work with Users (if not already selected). Select the disabled user's name in the right pane, and then click Edit User. Clear the Access Disabled check box, and then click Done.

You need local administrator rights to unblock a user account.

22. NEST Policy

You can think of NEST as a web enabled system of exchange of concepts, laboratory where artists, marchands, curators and researchers can present work, enter into radical collaborative media experiments, and play with the meaning of media objects by creating, transforming the downloaded media objects, which are in a sense a 'source code' to work with.

We have worked to create an NEST License, and we expect all those who want to participate in NEST to know, respect and abide by it.

23. NEST Group

Fundamental Research Lab head of the project: Robert B. Lisek coding: Robert B. Lisek, Szczepan Kuzniarz, Rafal Kozlowski, Piotr Mlodzian, http://www.fundamentalresearch.org mail: <u>lisek@fundamental.art.pl</u> phone: +48 500359251