



INSTALLATION AND CONFIGURATION OF THE ARK PLUGIN FOR OJS

Brief description

This guide serves as a support for the editors of scientific journals and managers of scientific journals who intend to use the ARK Persistent Identifier ("Archival Resource Key," archive resource keys) both in the articles, as well as the issues and the galleys in the OJS platform (Open Journal System)

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Main Concepts

What are ARKs?

ARKs ("Archival Resource Keys") are high-performance identifiers leading to things and descriptions of those things. For example:

https://n2t.net/ark:/67531/metadc107835/

What is a resolver?

A resolver is a website that specializes in forwarding incoming identifiers (the ones that were originally advertised to users) to the websites that are best able to handle them. In general, forwarding is called resolution; One step in a resolution process is called a redirect.

For a resolver to work, its hostname (<u>n2t.net</u> or <u>ark.bnf.fr</u>) in the identifiers above) should be chosen carefully so that it never needs to be changed. Memory organizations, some of them centuries old, tend to have hostnames suitable to be solvers. Some younger and better-known solvers are <u>n2t.net</u> (the ARK resolver), <u>identifiers.org</u>, <u>doi.org</u>, <u>handle.net</u> Y <u>purl.org</u>.

What do I need to create ARK?

First, you need a NAAN ("Name assigning authority number"), which is a number reserved exclusively for your organization. It should appear in every ARK that your organization assigns, right after the ark:/ tag. The NAAN in all these ARKs,

ark:/12148/btv1b8449691v/f29

http://ark.bnf.fr/ark:/12148/btv1b8449691v/f29 https://n2t.net/ark:/12148/btv1b8449691v/f29

is 12148, and uniquely identifies the National Library of France. Each NAAN is associated with a resolver URL for its ARKs, for example, to resolve the 12148 ARKs, add them to <u>http://ark.bnf.fr/</u> as shown above. The N2T.net resolver is unusual in that it directs any ARK to the resolver registered under its NAAN.

What are the parts of an ARK?



What do ARK, DOI, Handle, PURL, and URN have in common?

These are the main types of persistent identifiers (or schemas).

https://n2t.net/ark:/99999/12345	1. el protocolo (https://) más un nombre de host,
https://doi.org/10.99999/12345	2. solo para ARK y URN, también hay una etiqueta ("ark:" o "urn:"),
https://handle.net/10.99999/12345	3. la autoridad de asignación de nombre (99999, 10.99999 o 99999), que es la
https://purl.org/99999/12345	organización o grupo que creó un identificador particular,
https:// <various>/urn:99999:12345</various>	4. y finalmente, el nombre o identificador local que asignó (12345).

Installing the Plugins for OJS

Installing the plugins in OJS from the Modules Gallery

- 1. Log in to OJS with a user with administrative or journal manager permissions.
- 2. Select a journal in which to install the plugin
 - This step must be repeated for each journal in case multiple exist.
- 3. Go to Website > Plugins > Plugins Gallery.

As shown in the following figures.

test			
Envios Números Ajustes	Ajustes del sitio web Apariencia Configuración Módu Módulos instalados Galería de mó	ilos	Ө Ауы
nigo de callogo Distribución Usuarios/as y roles	Módulos	Descripción	Q Busca
Estadísticas Articulos Arthéfad editorial	Módulos de Metadatos (1) Metadatos Dublin Core 1.1	Proporciona plantillas Dublin Core 1.1 y compatibilidad de aplicaciones.	
Usuarios/as Generador de informes	Módulos de Autorización (0)	No hay artículos	
Herramientas	Módulos de Bloques (6) Bloque de exploración	Este módulo proporciona herramientas de exploración en la barra lateral.	
	Bloque "Creado por"	Este módulo proporciona un bloque lateral con un enlace a "Creado por".	

- 4. In the Plugins Gallery search for the module called "ARK".
 - Repeat steps 4-6 to install the "Public Identifier Resolver" Module
- 5. Click on the module and then click **Install**.
- 6. A confirmation message indicating that the plugin was installed correctly will show up.
- 7. Go to Installed Plugins and locate both installed modules:
 - ARK
 - Publd Resolver
- 8. Tick the **Active** checkbox.
 - This step must be repeated for each module

9. A confirmation message indicating that the plugin was activated correctly will show up.

Installing the plugins in OJS manually

OJS must be installed and running on our web server.

1. Determine the version of OJS installed

- 1. Log in to the admin account
- 2. Go to Management > System Information.

As shown in the following figures.

test			
Envios Números	Ajustes del sitio web	-	
Ajustes Revista Sillia web	Apariencia Configuración Módulos Módulos instalados Galería de módu	los	O Ayuda
Flujo de trabajo Distribución Usuarios/as y roles	Médulos		Q, Buscar Cargar un nuevo módulo
Estadisticas	Módulos de Metadatos (1) Métadatos Dublin Core 1.1	Descripción Proporciona plantillas Dublin Core 1.1 y	Adho
Actividad editorial Usuarios/as Generador de informes	Módulos de Autorización (0)	compatibilidad de aplicaciones. No hay artículas	
Herramjentas Administración	Módulos de Bloques (6) Elloque de exploración	Este módulo proporciona herramientas de exploración en la barra lateral.	0
	 Bloque "Creado por" 	Este módulo proporciona un bloque	
Administración			Ą
Gestión del siti Rexistas alojadas Configuración del	0 1820		
Euociones adm Información del sa	inistratiuns stema		
Borrar caché de di Borrar caché de la Limpiar el repistro	itos plantilla : de ejecución de tareas programadas		

For this guide, we will be using version 3.3.0.8, but the plugin to install is compatible with any version from 3.0 to 3.3.

2. Locate the version of the plugins according to the OJS version

- 1. Go to the ARK plugin repository
 - <u>https://github.com/yasielpv/pkp-ark-pubid.</u>

2. Go to Releases.

As shown in the following figure.

Search or ju	ump to 👔 Pull mg	uesta Issues Marketplace Espiore		ይ +- 🍕-
🛛 yasielpv / pk	kp-ark-pubid Rule			⊗Unwatch = 1 12 Star 1 12 Fork 0
O Code 💿	issues II Pull requests ③ Actio	ns 🗄 Projects 🕮 Wiki 🛈 Security	ビ Insights	
	P ejs-3.12.1 + P 2 branches Q	🕽 7 taga	Go to file Add file * Code +	About ®
	Yasiel Pérez Vera Update to version	1.0.3.1	seasce 4 days ago 🔞 9 commits	Archival Resource Keys (ARKs) serve as pensistent identifiers or stable trusted
	classes/form	Change NAAN validation	4 days ago	ARK Alliance is an open global
	🖿 (s	Create Plugin for OIS 3.1.2.1	6 months ago	community supporting the ARK infrastructure on behalf of research and
	iocale	Create Plagin for O/S 3.1.2.1	6 months ago	scholarship. This plugin for OJS allows
	templates	Create Plugin for OIS 3.1.2.1	6 months ago	managing the persistent identifier ARK for articles, issues, and galleys.
	ARKPubldPlugin.inc.php	Create Plugin for OI5 3.1.2.1	6 months ago	photo at at
	🗅 index.php	Fia Comments	6 months ago	
	version.xml	Update to version 1.0.3.1	4 days ago	Bulances d
	Help people interested in this repository	understand your project by adding a README.	Add a README	C ARK Publid Plugin v1.0.3.1 for (Lites) 4 days ago
				+ 3 releases

- 3. Locate the appropriate version and expand Assets.
 - For OJS versions 3.0 and 3.1, download 3.1.
 - For OJS versions 3.2 and 3.3, download 3.3.
- 4. Download the package called pkp-ark-pubid-ojs-[version].tar.gz.

The following figure shows the option to download for OJS 3.3.0.8.

© v1_0_3-0 -0- 157/84e Compare *	ARK Publd Plugin v1.0.3 for OJS v3.3	Edit
	v1_0_3-0 v1_0_3-0	
	 Assets 3 pkp-ark-pubid-v1_0_3-0.tar.gz Source code (zip) Source code (tar.gz) 	12.4 KB

- 1. Go to the Publd Resolver plugin repository
 - <u>https://github.com/yasielpv/publdResolver</u>.

- 2. Go to Releases.
- 3. Locate the lastest version and expand Assets.
 - In this case, there is only one version for OJS from 3.0.X to 3.3.X.
- 4. Download the package called pubIdResolver-[version].tar.gz.

3. Install the plugins in OJS

- 1. Log in to OJS with a user with administrative or journal manager permissions.
- 2. Select a journal in which to install the plugin
 - This step must be repeated for each journal in case multiple exist.
- 3. Go to Website > Plugins > Installed Plugins
- 4. Click on Load a new plugin and locate the file downloaded in the previous step.
 - Repeat steps 4-6 to install the "Public Identifier Resolver" module

As shown in the following figures

test			
Envios Números	Ajustes del sitio web	1	
Ajustes			O Ayuza
Sitio web	Módulos instalados Galería de módulos		
Distribución	Módulos		Q. Busca Cargar un nuevo módulo
Usuarios/as y roles	Nombre	Descripción	Activo
Estadísticas	Módulos de Metadatos (1)		
Articulos	Metadatos Dublin Core 1.1	Proporciona plantillas Dublin Core 1.1 y	12
Actividad editorial		compatibilidad de aplicaciones.	
Usuarios/as	Módulos de Autorización (0)		
Generador de informes		No hay articulas	

- 5. Finish the installation by clicking **Save**.
- 6. A confirmation message indicating that the plugin was installed correctly will show up.
- 7. In Installed Plugins locate both installed modules:
 - ARK
 - Publd Resolver
- 8. Tick the **Active** checkbox.
 - This step must be repeated for each module

9. A confirmation message indicating that the plugin was activated correctly will show up.

The following figures show the modules already activate.

Módulos de Identificador Público (4)		
- ARK	Este módulo activa la asiganción de ARK (Archival Resource Key) de los números, artículos y galeradas en OJS.	
Ajustes <mark>Eliminar</mark> Actualizar		
Módulos de Pasarela (2)		
 Módulo Resolver 	Este módulo obtiene números y artículos basado en información de citas.	
 Módulo Pub Id Resolver 	Este módulo obtiene números, artículos y galeradas basado en los identificadores persistentes registardos en la plataforma OJS.	

ARK Plugin Configuration for OJS

To configure the ARK module:

- 1. Within the module go to Settings
 - For this option to appear, the module must be activated previously, as shown in the previous step.

As shown in the following figure.

N	Módulos de Identificador Público (4)			
•	ARK	Este módulo activa la asiganción de ARK (Archival Resource Key) de los números, artículos y galeradas en OJS.		
	Ajustes Eliminar Actualizar			

2. A configuration window with several sections will appear.

See the section explanations below.

First Section: Journal Contents

The first configuration section consists of 3 checkboxes corresponding to each element (Issues, articles and galleys) to which ARK persistent identifiers can be assigned.

Issues	An issue compendium of all the articles in a publication of a journal		
	Assigning an ARK to an issue does not assign ARKs to your articles, but rather it assigns the issue as a whole		
Articles	An article is each one of the works present in a publication of a journal		
	Articles are the ones that most commonly have persistent identifiers.		
Galleys	A galley is each one of the different views or files that an article has.		
	The same article can have a galley in PDF, another in HTML, another in EPUB, etc. Galleys are often associated with the downloadable files of an article		

Second Section: The ARK prefix

The ARK prefix is validated to be "betanumeric" from 1 to 16 characters in length, that is, it accepts any combination of the following characters with a length of 1 to 16: 0123456789bcdfghjkmnpqrstvwxz.

Third Section: The ARK Suffix

The third section corresponds to the ARK suffix, which is the changing part of the ARK address, which varies depending on the type of element (issue, article or galley) that the ARK is assigned to.

For this section, wildcards are used. See the wildcards explanations below.

This section has 3 settings.

- The first assigns ARK suffixes using default patterns:
 - %j.v%vi%i for issues,
 - %jv%vi%i.%a for articles
 - % jv%vi%i.%a.g%g for galleys.

For example:

For a journal with the initials "test", for issue 5, volume 2 would be assigned test.v2.i5.

The ARK suffix assigned to the article with ID 89, would be test.v2.i5.a89.

And for the galley with ID 6 of the previous article, the suffix would be test.v2.i5.a89.g6.

- The second, allows you to manually add each item's ARK in its metadata.
 - This option is useful when the ARKs do not follow any pattern.

• The third allows assigning user predefined patterns.

When this checkbox is ticked the text fields are activated.

It is important to clarify that only the boxes for those items selected in the first section of the present configuration will activate. The patterns are replaced by the values of each element depending on the wildcards used.

Wildcards

°∋j	Journal Initials
%V	Volume Number
°°γ	Issue Year
%a	Article Id
%g	Galley Id
%f	File Id
%p	Page Number
⁹ ∞X	Custom Identifier

Fourth Section: ARK Resolver URL

The fourth section corresponds to the URL of the ARK resolver. It is recommended for it to be the local ARK resolver, although it can be any ARK resolver.

This URL will be concatenated with the ARK prefix and then the ARK suffix.

[Resolution URL] + [ARK prefix] + [ARK suffix].

The resolution URL must begin with http:// or https://, followed by the address of the resolver, and end with /.

Fifth Section: Reassigning ARKs

The fifth section provides us with the option to Reassign ARKs, this deletes all the ARKs assigned in the OJS platform to issues, articles and galleys. Then they are automatically reassigned following the settings established in the previous steps. This option is recommended for when a configuration change is made in the plugin and all previously assigned ARKs must be deallocated.

After configuring the plugin, the configuration must be saved using the **Save** button.

Assigning an issue's ARK

To assign an ARK to a journal issue:

- 1. Select the issue.
- 2. Click Edit.
- 3. Go to Identifiers and verify that the ARK matches the desired configuration
- 4. Tick the **Assign the ARK** checkbox
- 5. Click **Save** to assign the ARK to the issue.
 - Once saved, The assigned ARK is uneditable, but it can be deallocated.

Gestión del número: Vol. 1 Núm. 1 (2020): Septiembre - Febrero				×	
Tabla de contenidos	Datos del número	Galeradas del número	Identificadores Ayuda		
ARK					
ark:/42411/test.v1i1					
Lo que se muestra es una asignar el ARK.	vista previa del ARK. Sele	ccione la casilla de verificació	in y guarde el formulario para		
Asignar el ARK ark:/42411/test.v1i1 a este número					
Use la siguiente opción pa para este número.	ra limpiar los ARKs de to	dos los objetos (artículos y ga	alerias) actualmente programado	DS	
Limpiar ARKs de los Obj	etos del Número				
			Guardar Canc	elar	

Clear deallocates this issue's ARK.

Clear Issue's Objects ARKs, deallocates the ARKs associated with the articles and galleys that are assigned to this issue.

Assigning an article's ARK

To assign an ARK for an article in a journal:

- 1. Select the article.
- 2. Click View.
- 3. Go to **Publication > Identifiers.**
 - 3.1. If the ARKs are automatically assigned, verify that the ARK matches the desired configuration.
 - 3.2. If the ARKs are manually assigned, the text field will be editable.

4. Click Assign.

- 5. Click **Save** to assign the ARK to the article.
 - Once saved, The assigned ARK is uneditable.

As shown in the following figure.

test					Δ @
Envios Números	Publicado 1 / admin /	Revistas Universidad La Salle		Ver Registro de ac	tividad Biblioteca de envío
Ajustes	Flujo de trabajo Publi	icación			0 Ayuda
Revista Sitio web	Estado: Publicado			Retirar de publicación	Crear una versión nueva
Flujo de trabajo	Titulo y resumen				
Distribución Usuarios/as y roles	Colaboradores/as	ARK	Asignar		
Estadisticas	Metadatos	PURL			
Artículos	Identificadores	ulasalle.edu.pe/revistas/test.v1i1.1	Limpiar		
Actividad editorial	Galeradas				
Usuarios/as					Guardar
Generador de Informes	Permisos y divulgación				
Herramientas	Número				
Administración					

Assigning a galley's ARK

To assign an ARK for a journal galley:

- 1. Select an article and click View.
- 2. Go to **Publication > Galley**.
- 3. Create a Galley and click Edit.
- 4. Go to Identifiers and verify that the ARK matches the desired configuration
- 5. Tick the Assign the ARK checkbox
 - If the "Assign the ARK ark://####### to this galley" checkbox is not ticked, the ARK will not be assigned.
- 6. Click **Save** to assign the ARK to the issue.
 - Once saved, The assigned ARK is uneditable, but it can be deallocated.

Editar una galerada de maquetación		×
Edita los metadatos Identificadores	O Ayuda	
ARK		
ark:/42411/s1/a1/g1		
Lo que se muestra es una vista previa del ARK. Seleccione la casilla de verificación y guarde el form asignar el ARK.	ulario para	
Asignar el ARK ark:/42411/s1/a1/g1 a este galerada		
PURL		
ulasalle.edu.pe/revistas/s1/a1/1		
El PURL asignado a este galerada.		
Limpiar PURL		
Gua	rdar Cance	elar

Access the ARKs with the local resolver

The Publd Resolver Module resolves articles, issues and galleys using the persistent identifier registered in the system. It can be accessed in the following URL pattern:

http://localhost/index.php/myJournal/gateway/plugin/pubIdResolver/[pubId]

where:

- localhost is the name of the local server
- myJournal is the path to the journal.

The module must be active to respond to requests.

To activate the module, or ensure that you have the necessary permissions:

- 1. In the Journal Manager go to Installed Modules.
- 2. Under Gateway Modules locate Publd Resolver Module.
- 3. Tick the **Activate** checkbox.

The module accepts parameters after the given URL pattern in the following formats:

http:///[do)i]
http:///[ur	n]
http:///[pu	rl]
http:///[ar	:k]

where [doi], [urn], [purl] and [ark] are strings that identify the persistent identifier of the desired content. For example:

ARK:

http://localhost/index.php/myJournal/gateway/plugin/pubIdResolver/ark:/12345/fk12345

DOI:

http: //localhost/index.php/myJournal/gateway/plugin/pubIdResolver/10.12345/fk12345

The item's metadata can also be obtained using the ERC format by adding question marks to the end of the persistent identifier.

The ERC format includes who, what, when, where, how, and target metadata.

- Who is the creator of the article.
- What is the name of the article.
- When is the publication date of the article.
- Where is the persistent URL of the article.
- How is the format of the element.
- Target is the final URL of the element.

For example:

erc: who: Veloz Morales, Dargel; González Marrero , Laritza what: Selección de una red social para apoyar la docencia universitaria empleando computación con palabras when: 2021-09-30 00:00:00 where: ark:/42411/s6/a47 (https://n2t.net/ark:/42411/s6/a47) how: (:mtype text) article _t: https://revistas.ulasalle.edu.pe/innosoft/article/view/47