

Snoop Video : Découvertes

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Snoop : Une co-création

Depuis plus de **10 ans**, **Snoop** est une une **co-création** :

- Recherche Théorique et Appliquée commune,
- Développement d'une plateforme commune de R&D,
- et Industrialisation Collaborative :
 - **Ina** : applications pour la **Culture**,
 - **Inria** : applications pour le **Vivant**.

Snoop : Financements

Sur les fonds propres de l'Ina et de l'Inria.

Conventions Ministère de la Culture-Inria :

- **Gallica Snoop** : BnF, Inria et Ina 2018-2020.
- **Snoop Video** : Inria et Ina 2020-2021.

Snoop : Applications pour la Culture

Aide documentaire : trier des contenus visuels, annoter, ...

Exploration des grands corpus visuels, exemple : Recherche et découverte de contenus pour les clients de l'Ina (Stock Shot),

Analyse de corpus de photographies ou de vidéos pour les chercheurs de l'Inathèque

=> Etude par le contenu visuel pour des recherches en SHS.

=> Industrialisation et déploiement en cours

Snoop : Applications pour le Vivant



‘A citizen science platform that uses AI to help people identify plants with their mobile phones’

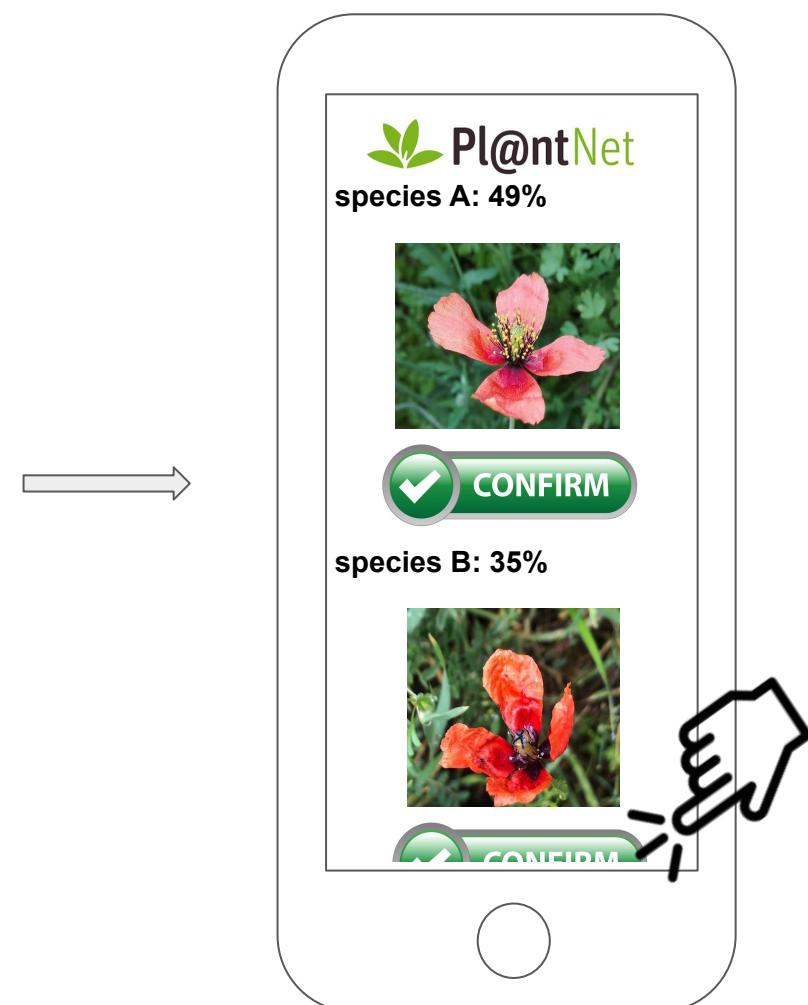
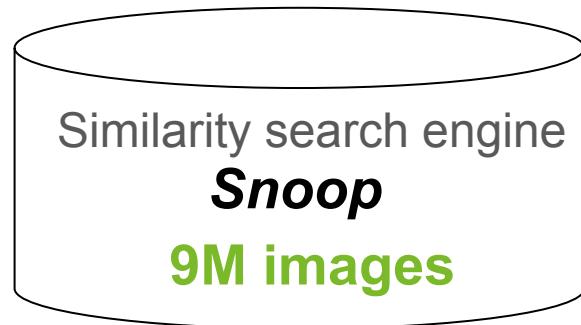
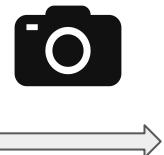
25 Million users
200+ countries
Up to 2M identifications per day





similarity search powered by Snoop

User's visual control =
uncertainty reduction



Pl@ntNet API



EUROPEAN OPEN
SCIENCE CLOUD

- A secured API providing developers programmatic access to Pl@ntNet engine (= Snoop)
- **8K developer accounts** (companies, researchers, citizen observatories)
- Integrated in **European Open Science Cloud (EOSC)**

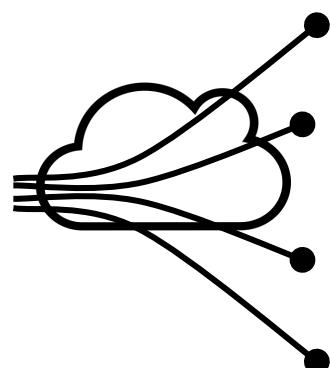


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[API Documentation](#)

[Getting started](#) [GET / POST examples](#) [OpenAPI doc.](#)

[Getting started](#)



 **GARDENA**
 **TRUGREEN**®
Professional Lawn Care



Snoop : Stratégie Mettre l'utilisateur au centre

L'idée : les utilisateurs au centre d'un système interactif d'Intelligence Artificielle (IA).

Permettre aux **utilisateurs** d'interagir avec l'IA afin :

- de **créer**,
- d'**enrichir**,
- et d'**exploiter à large échelle**

des **bases de connaissances riches et précises**.

Personnaliser les classes visuelles pour chaque utilisateur.

Snoop : Démonstration

Snoop : Les fonctionnalités actuelles

Une IA visuelle pilotée par des utilisateurs experts.

Découverte à très large échelle de contenus originaux

=> des milliards d'images ou des centaines de milliers d'heures de vidéo.

Création interactive de modèles personnalisés visuels à très large échelle.

Création de modèles visuels précis.

IA frugale.

Snoop : Nos derniers avancements

**Accélération du processus d'apprentissage interactif des modèles :
7 fois plus rapide qu'il y a un an !!! => Encore plus frugale !**

Intégration des tous derniers réseaux de neurones visuels, DinoV2.

Intégration de requêtes textuelles avec des réseaux de neurones Image et Texte (multilingue) : M-Clip.

Snoop : Nouvelles ambitions

Recherche et modélisation locales d'objets (nouvelle thèse de doctorat).

Snoop

Search result

50 images



Score: 0.5813

Set positive or negative



Create class from this image

Existing classes

Add image to existing class

Search

Close

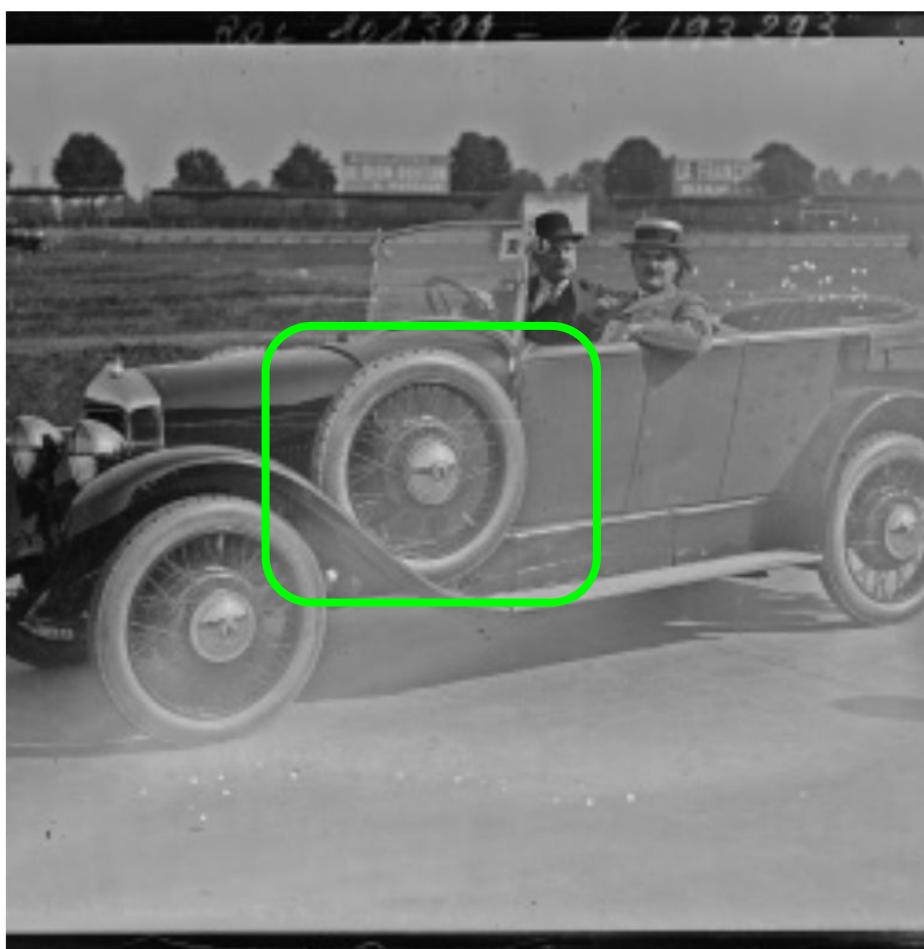
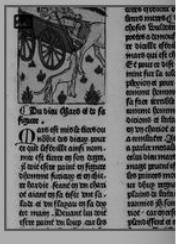
Snoop



My C

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Snoop



Search result

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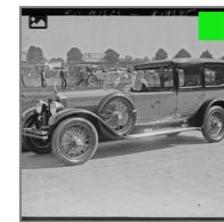
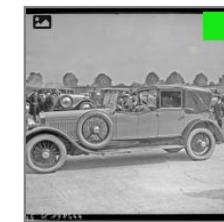
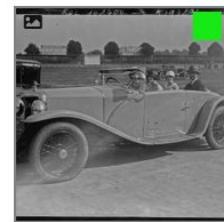
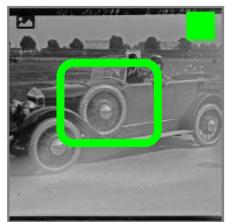
Mark as or

Pictures size



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No current images selected



Clear

Search

Snoop

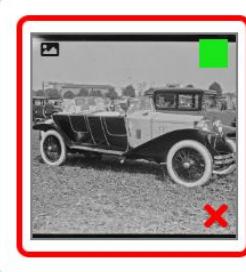
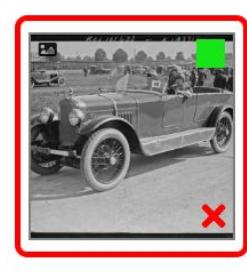
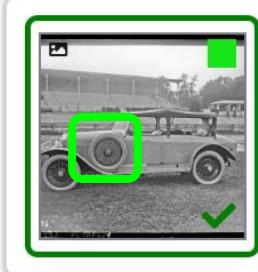
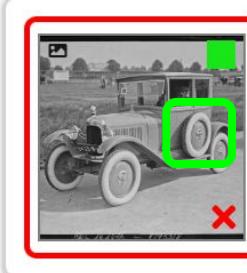
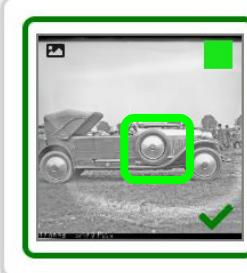
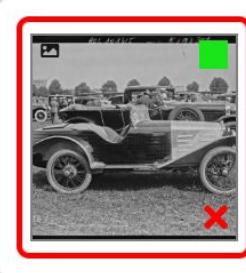
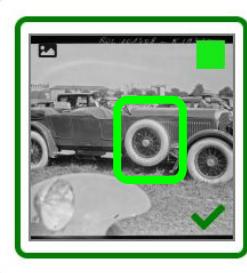
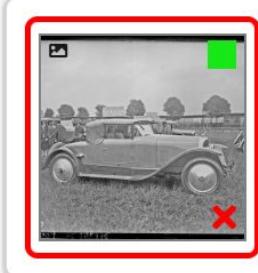
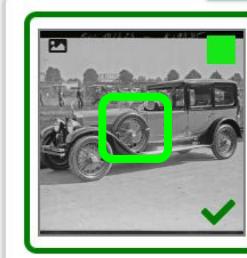
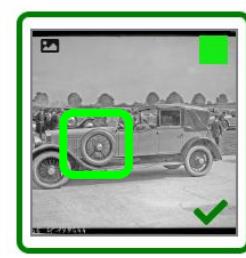
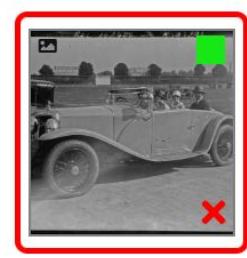
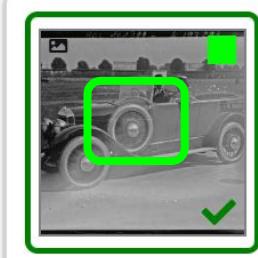


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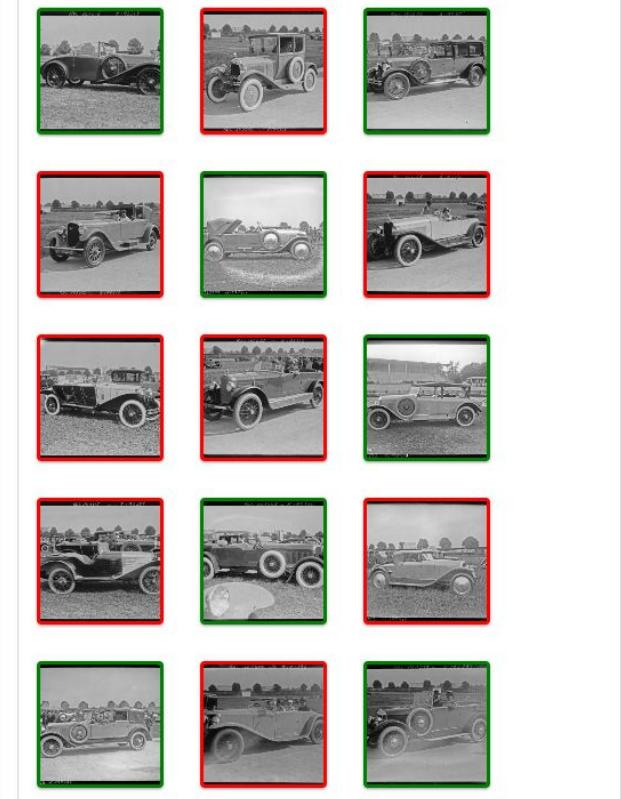
50 images

Mark as or

Pictures size



Current Selection : 15 Images



Clear

Advance

Search

Snoop : Nouvelles ambitions

Recherche et modélisation locales d'objets (nouvelle thèse de doctorat).

Snoop : Nouvelles ambitions

Recherche et modélisation locales d'objets (nouvelle thèse de doctorat).

Adaptation des réseaux de neurones aux contenus Culturels :

- objets spécifiques et anciens,
- qualité des contenus visuels anciens.

Snoop : Nouvelles ambitions

Recherche et modélisation locales d'objets (nouvelle thèse de doctorat).

Adaptation des réseaux de neurones aux contenus Culturels :

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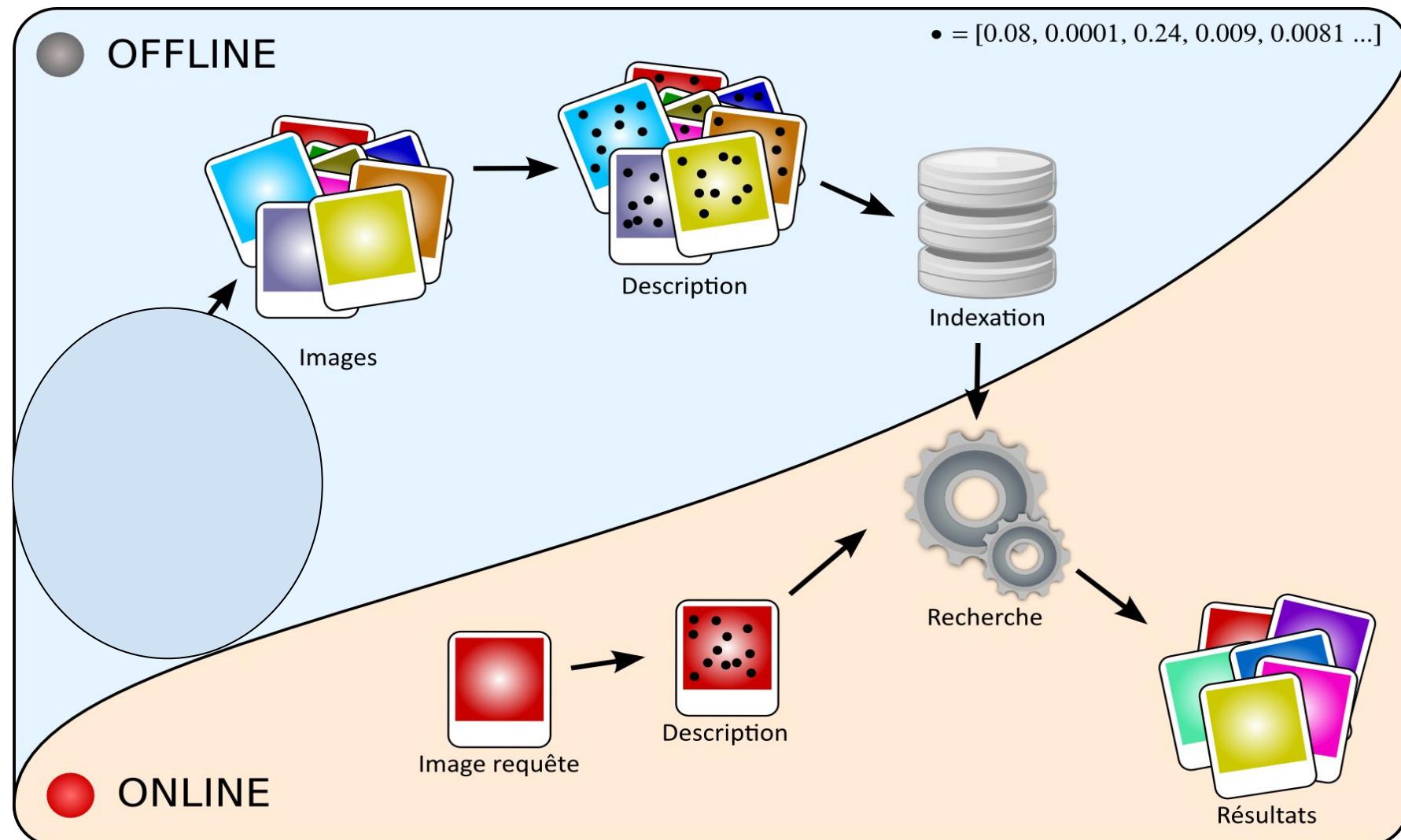
Frugalité de l'IA pour le traitement à l'échelle : poursuite des travaux.

Merci !

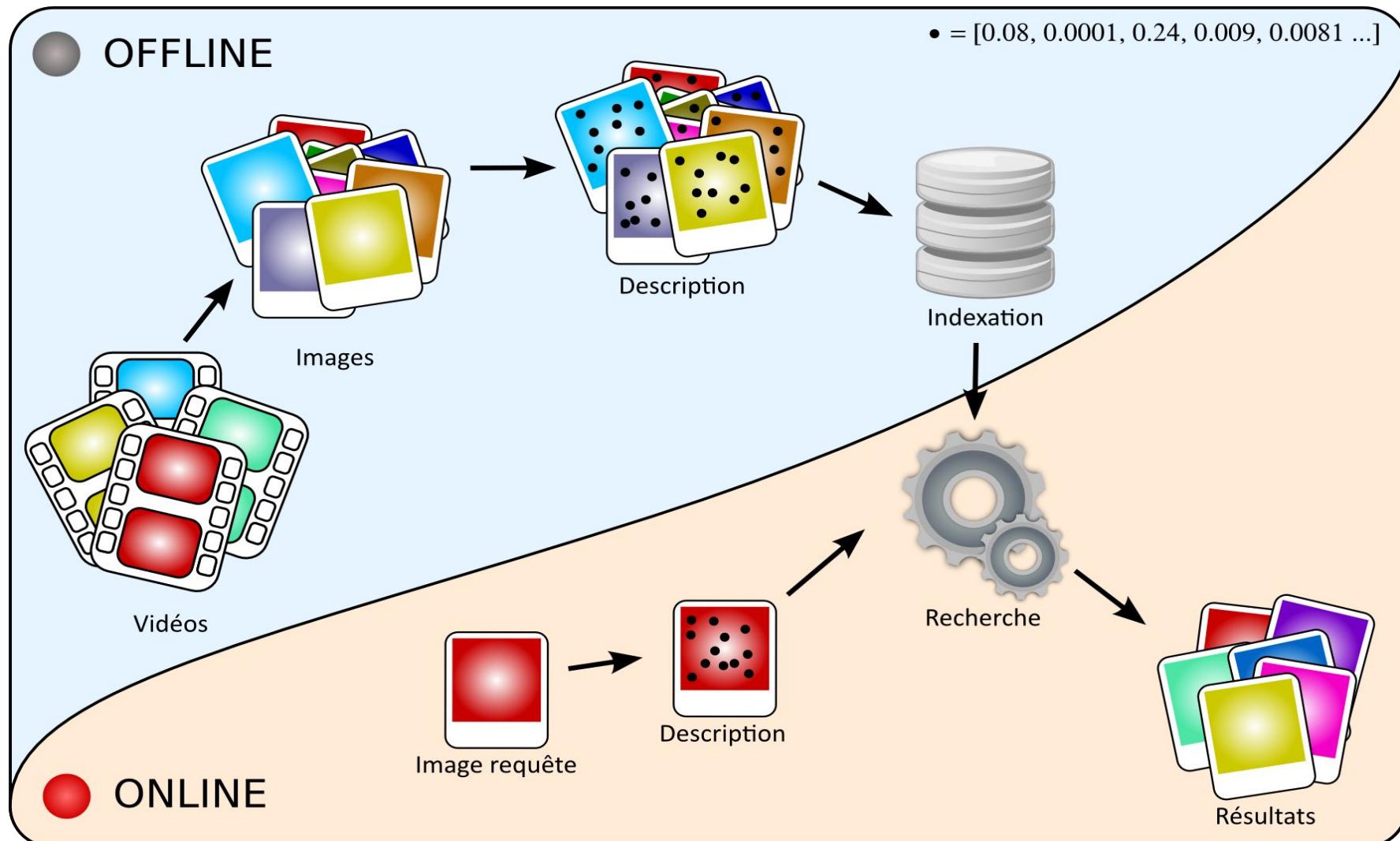
Contact : obuisson@ina.fr

Snoop : Principe

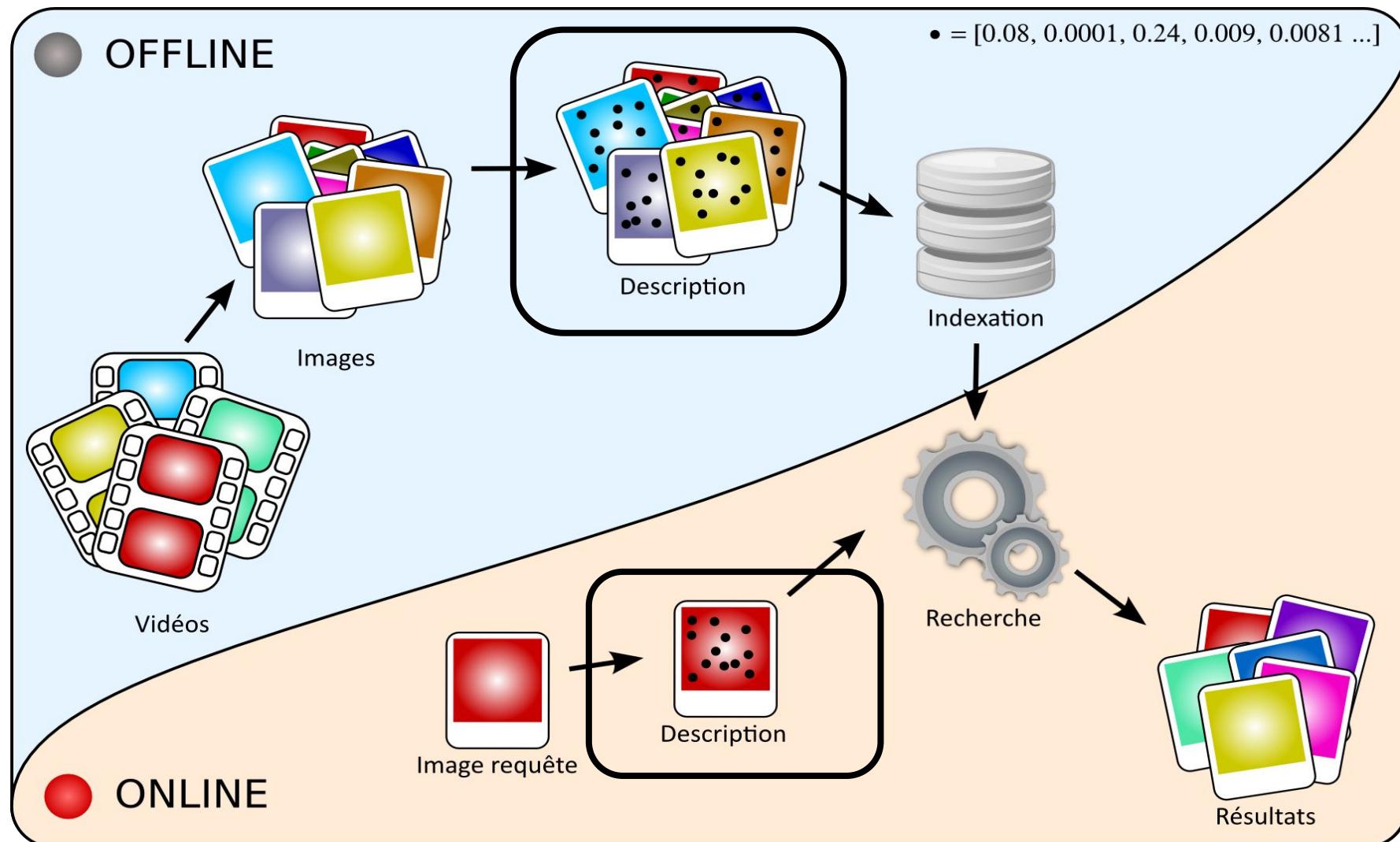
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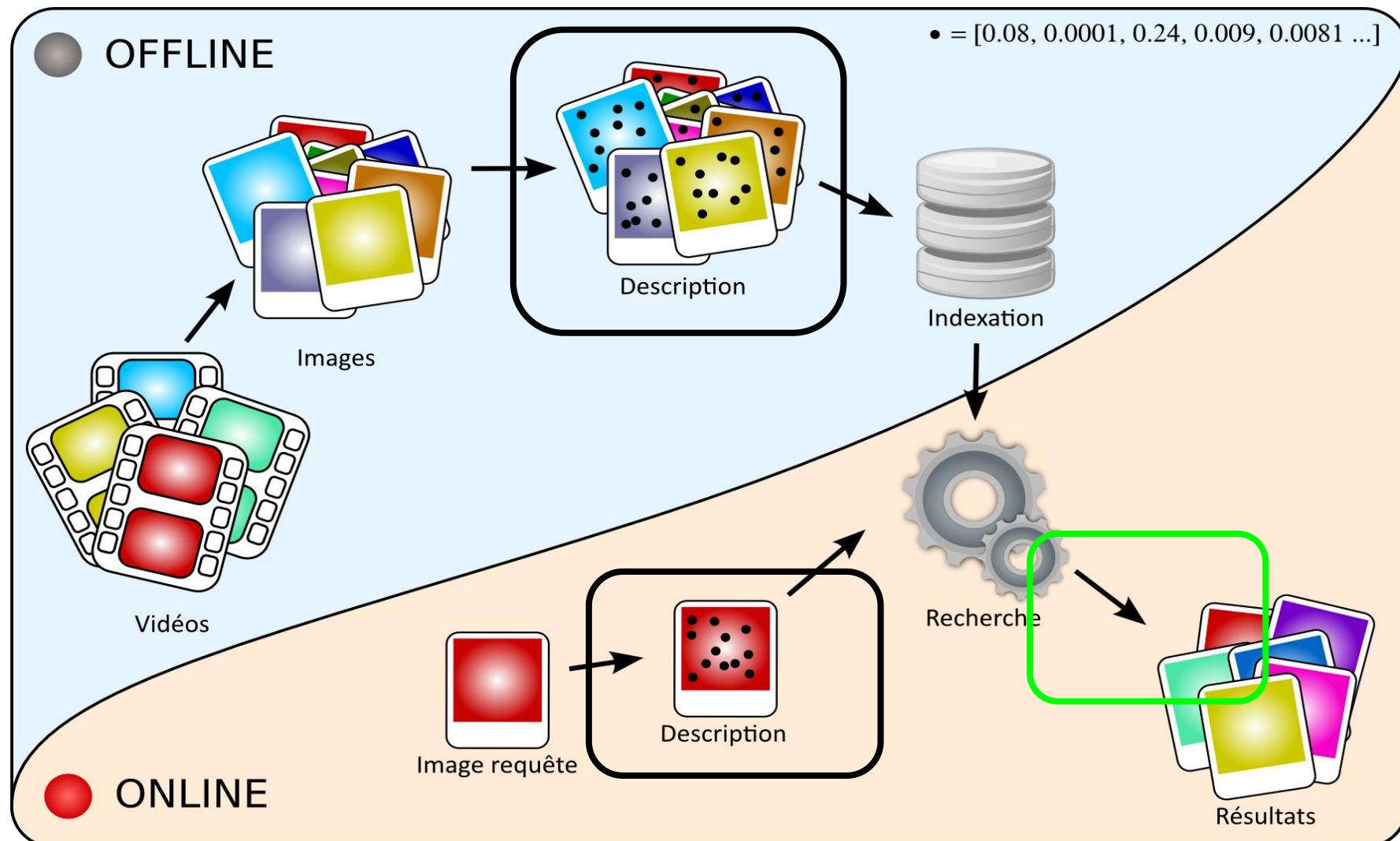
Snoop : Principe



Snoop : Principe



Snoop : Principe



Snoop : Découverte à très large échelle => ina.fr : 60000h



ina.fr

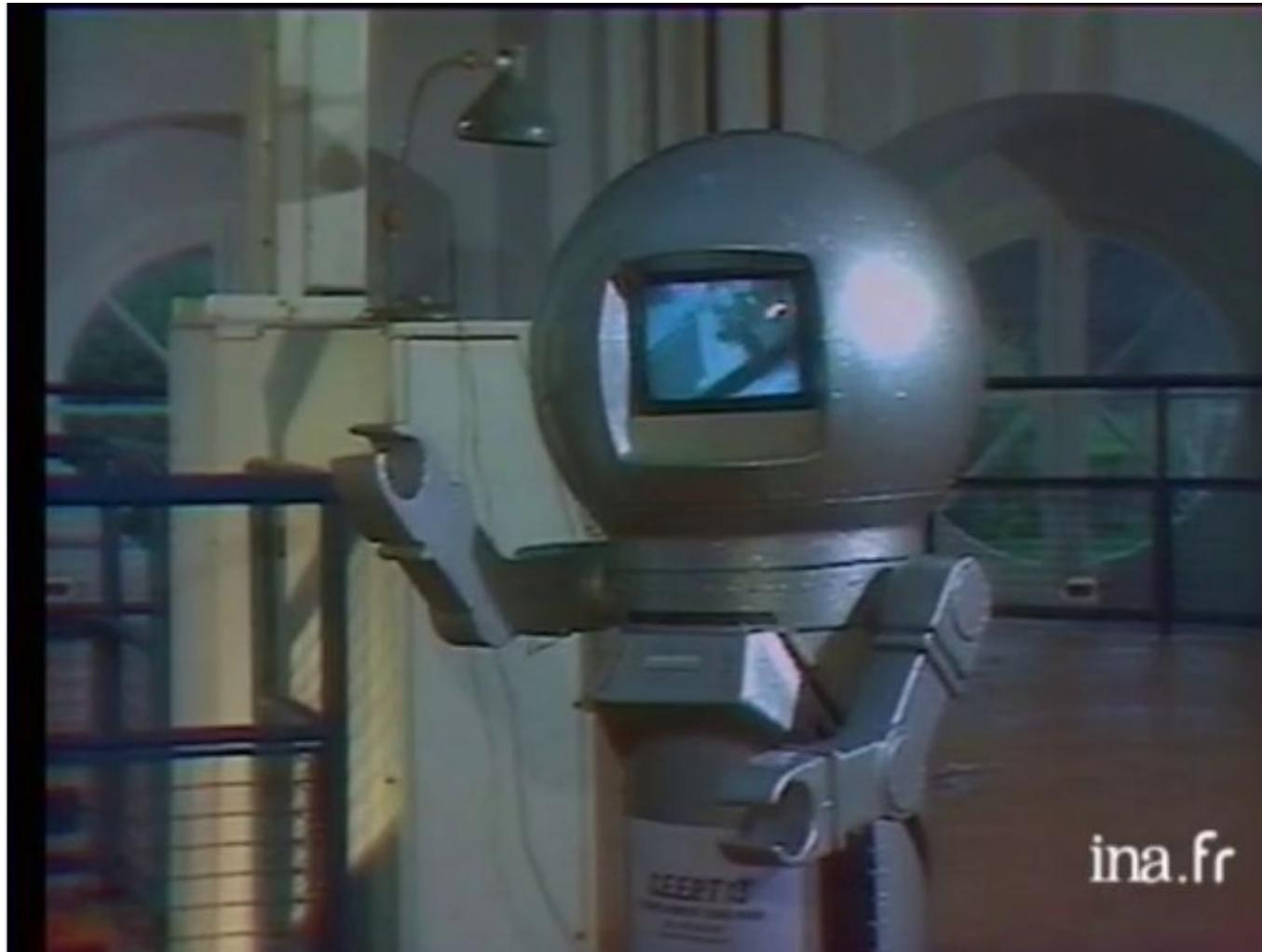


ina.fr

Snoop : Robots : 2000h

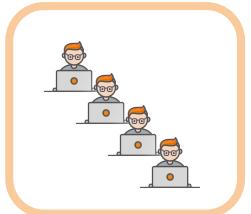


Snoop : ina.fr : 60000h

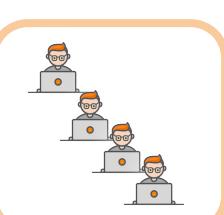
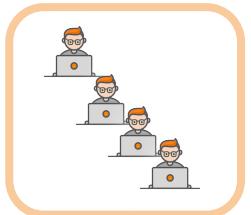
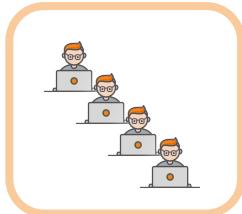


Snoop : Création et Découverte Intra-établissement

Documentalistes



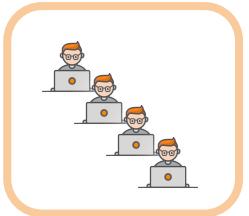
inamediapro



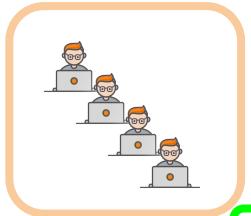
Ina

Snoop : Création et Découverte Intra-établissement

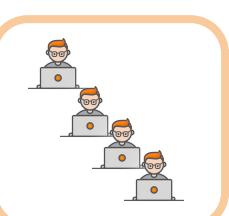
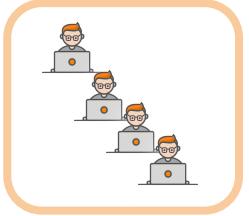
Documentalistes



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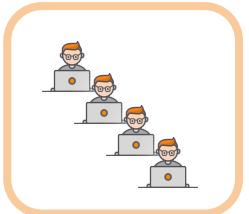
Modèles



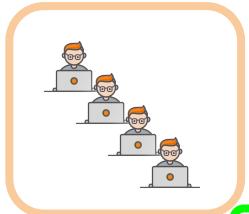
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Snoop : Création et Découverte Intra-établissement

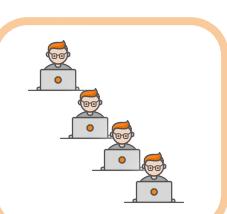
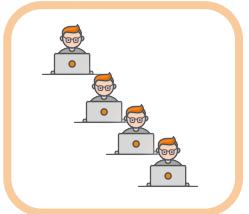
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Modèles



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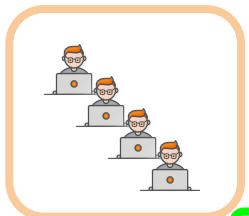


Snoop : Exploitation et Découverte Intra-établissement

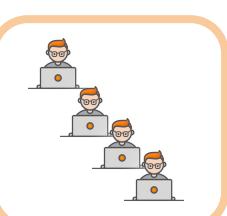
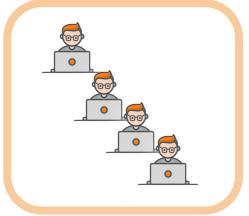
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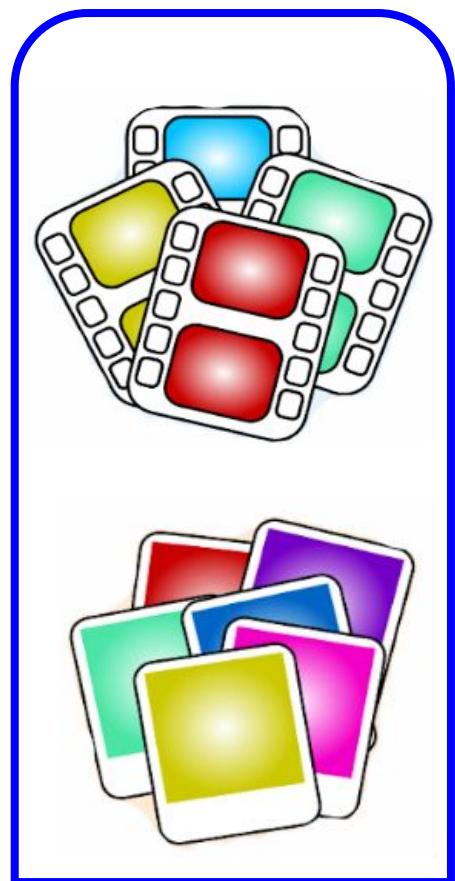


Modèles

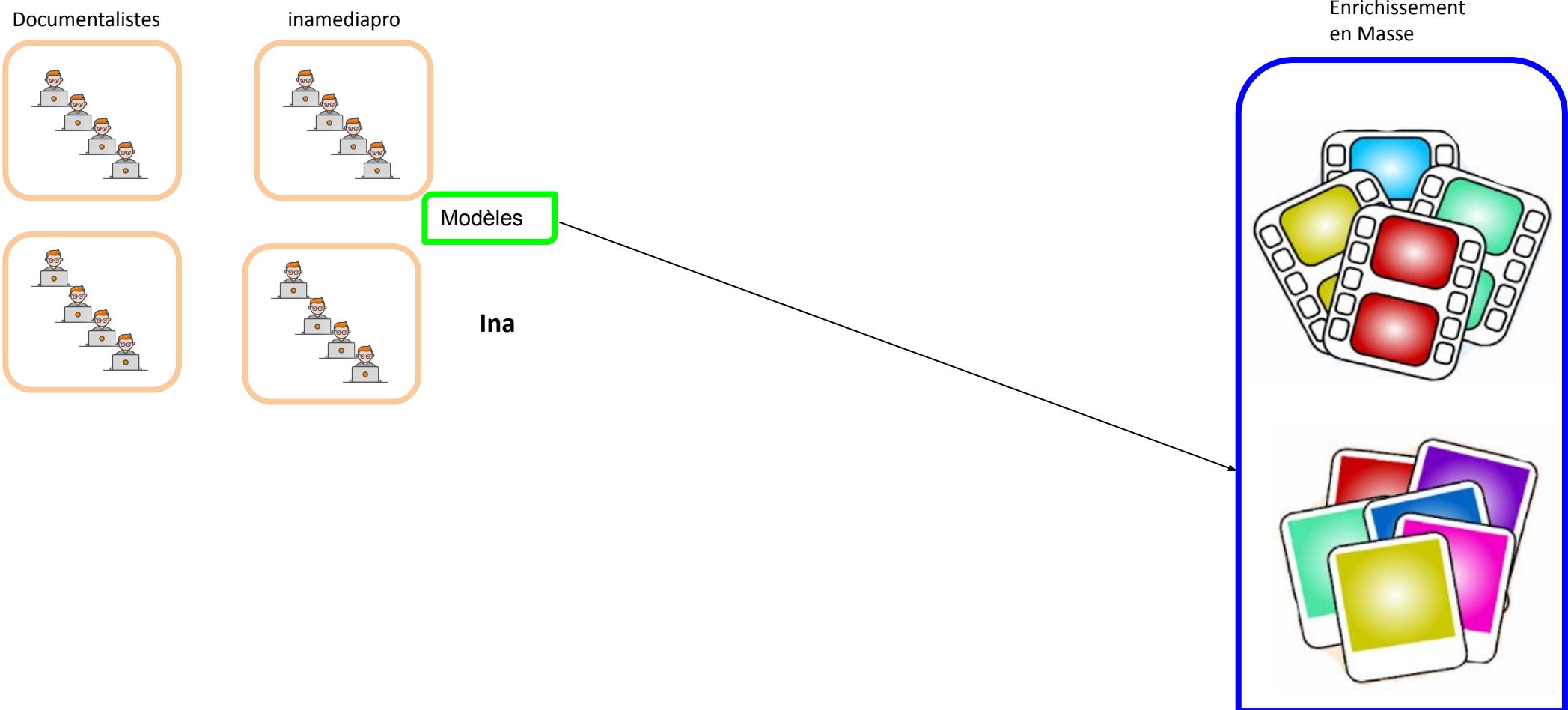


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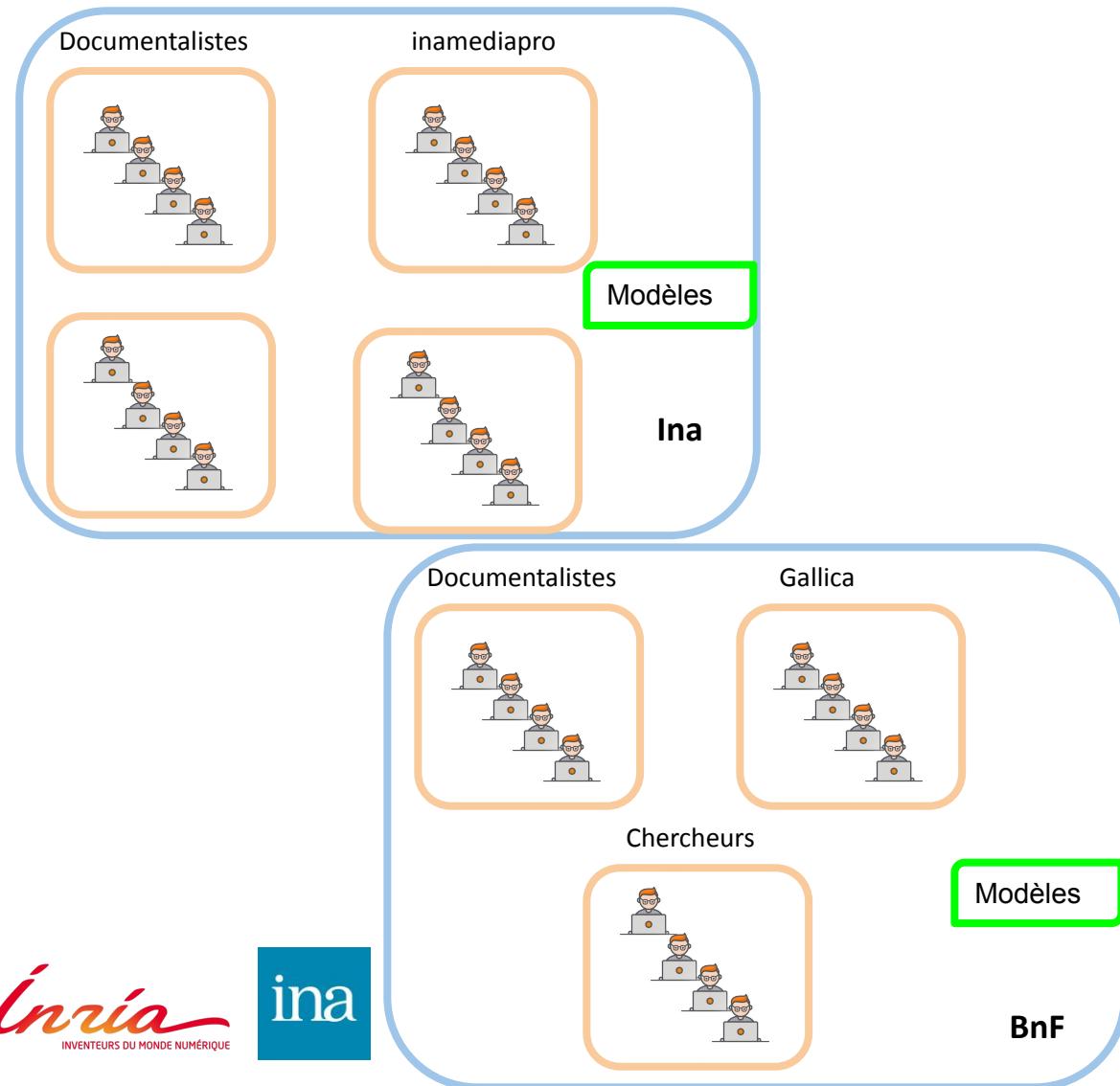
Enrichissement
en Masse



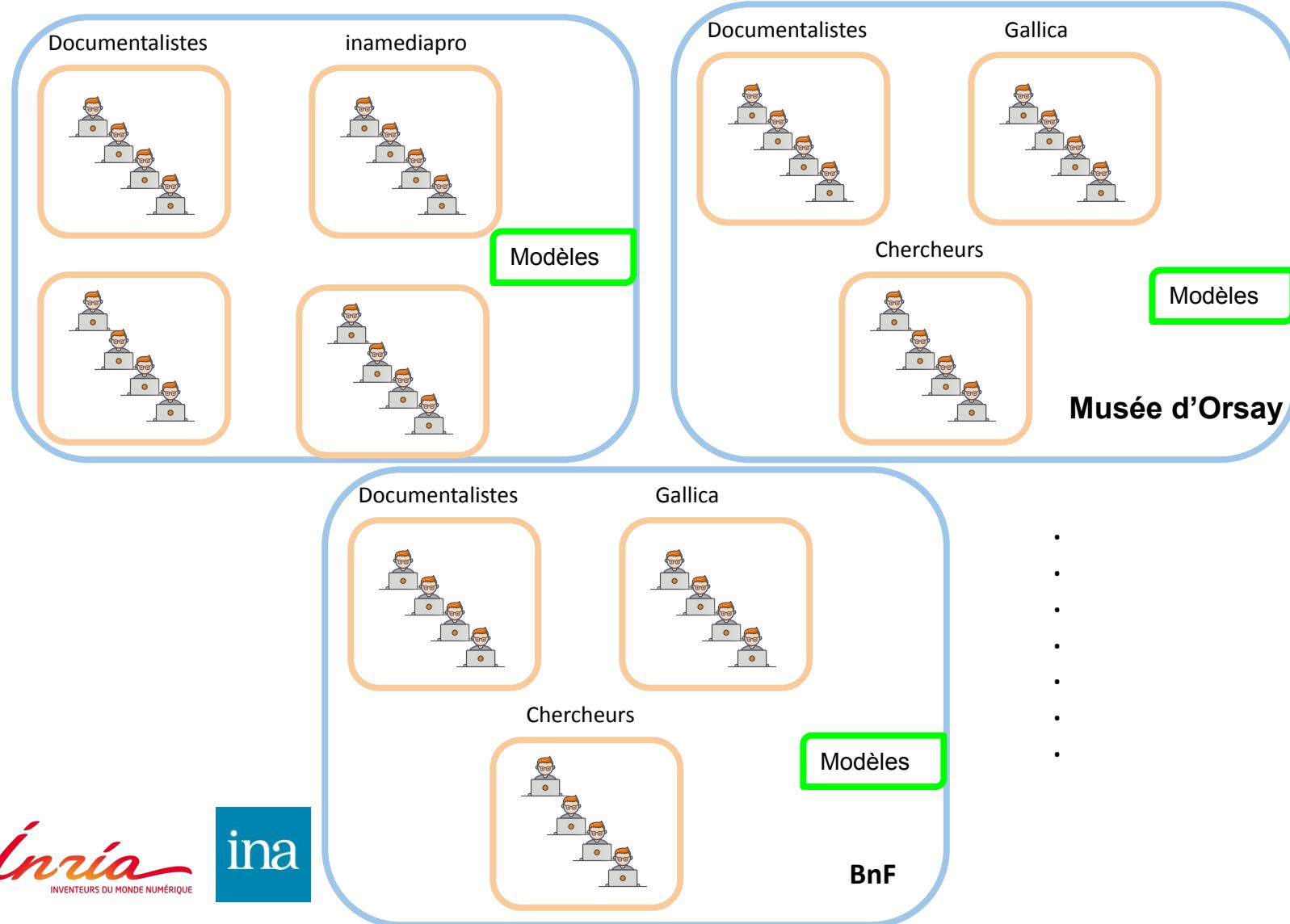
Snoop : Exploitation et Découverte Intra-établissement



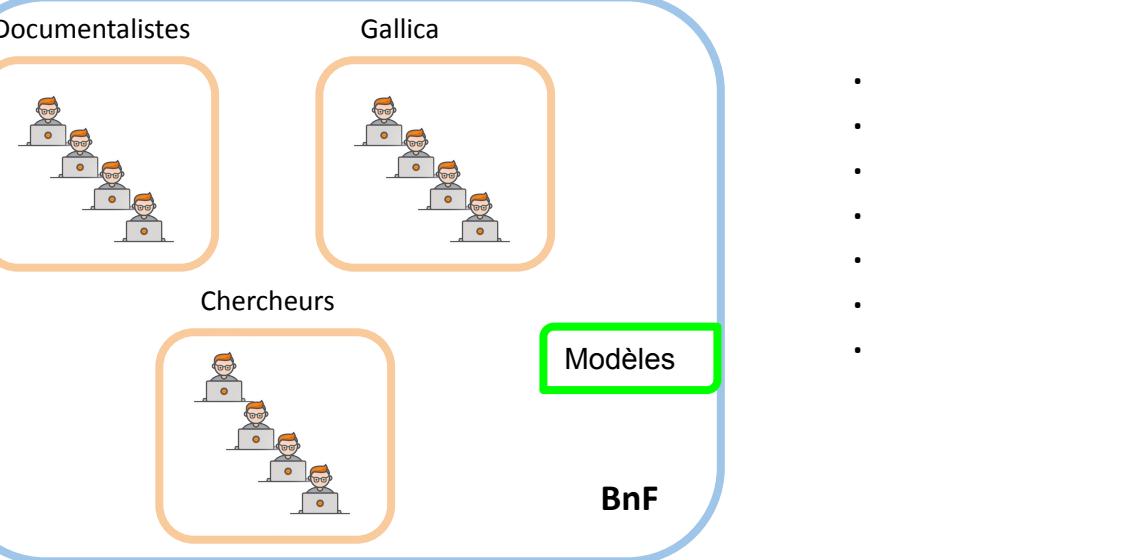
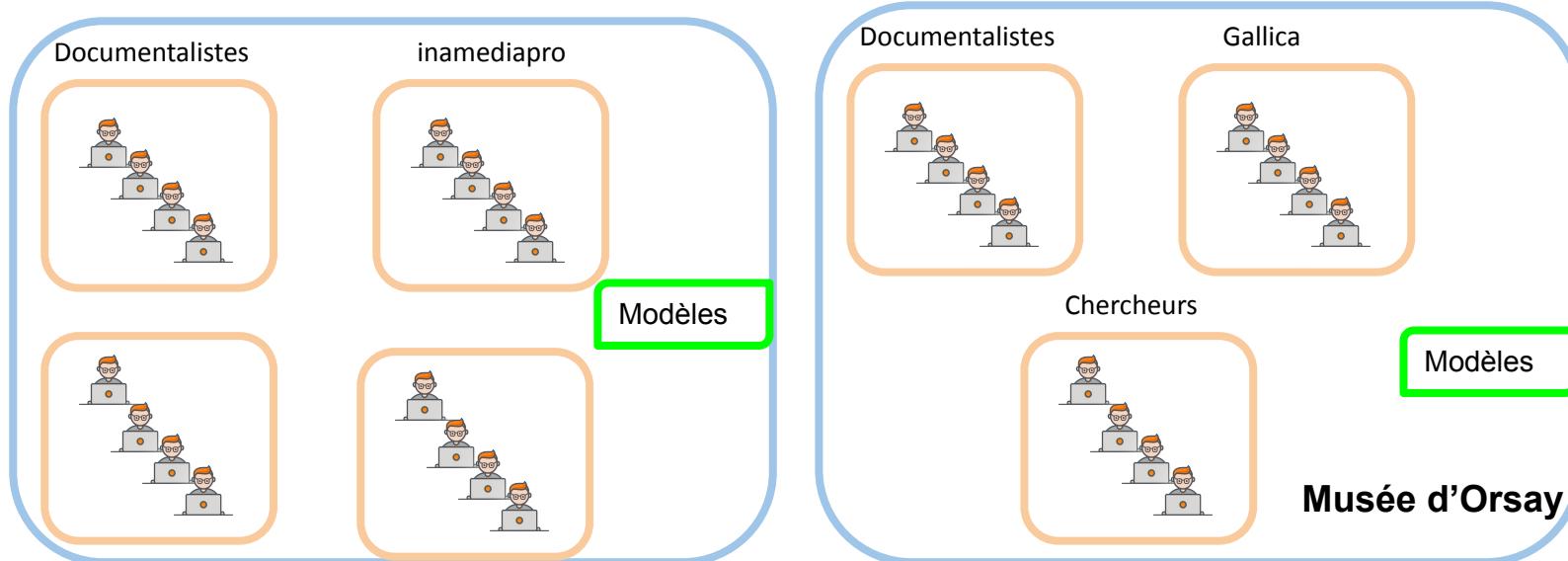
Snoop : Création et Découverte Multi-établissement



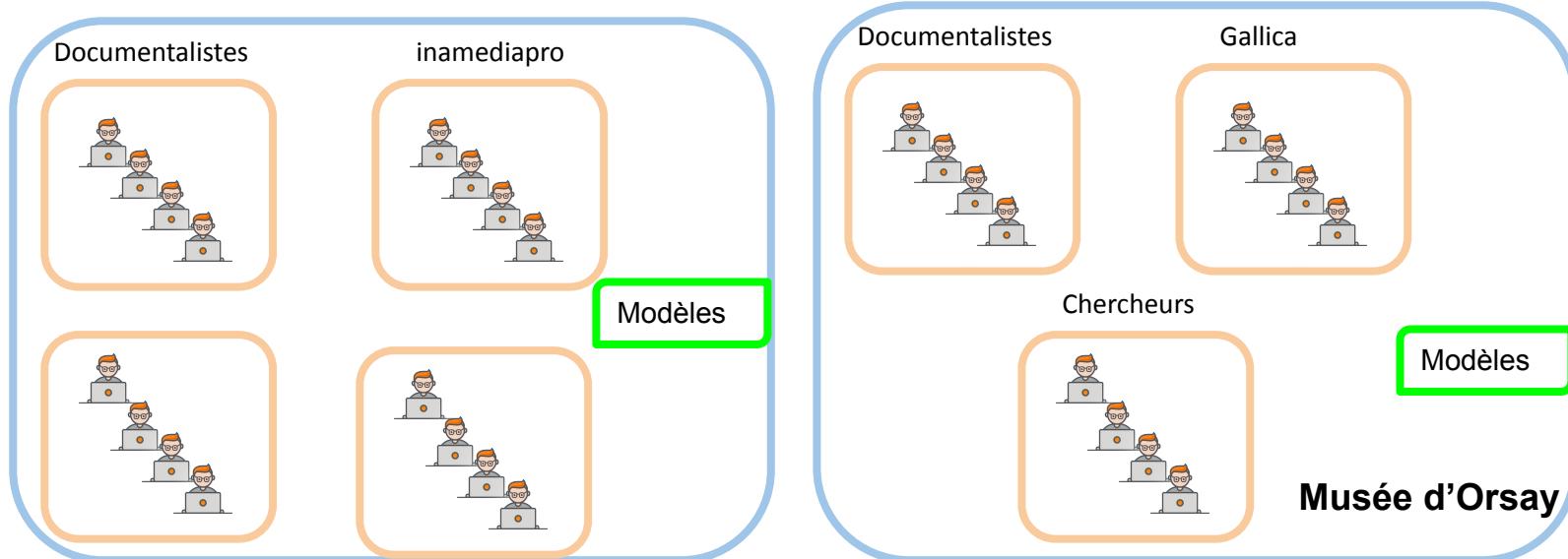
Snoop : Création et Découverte Multi-établissement



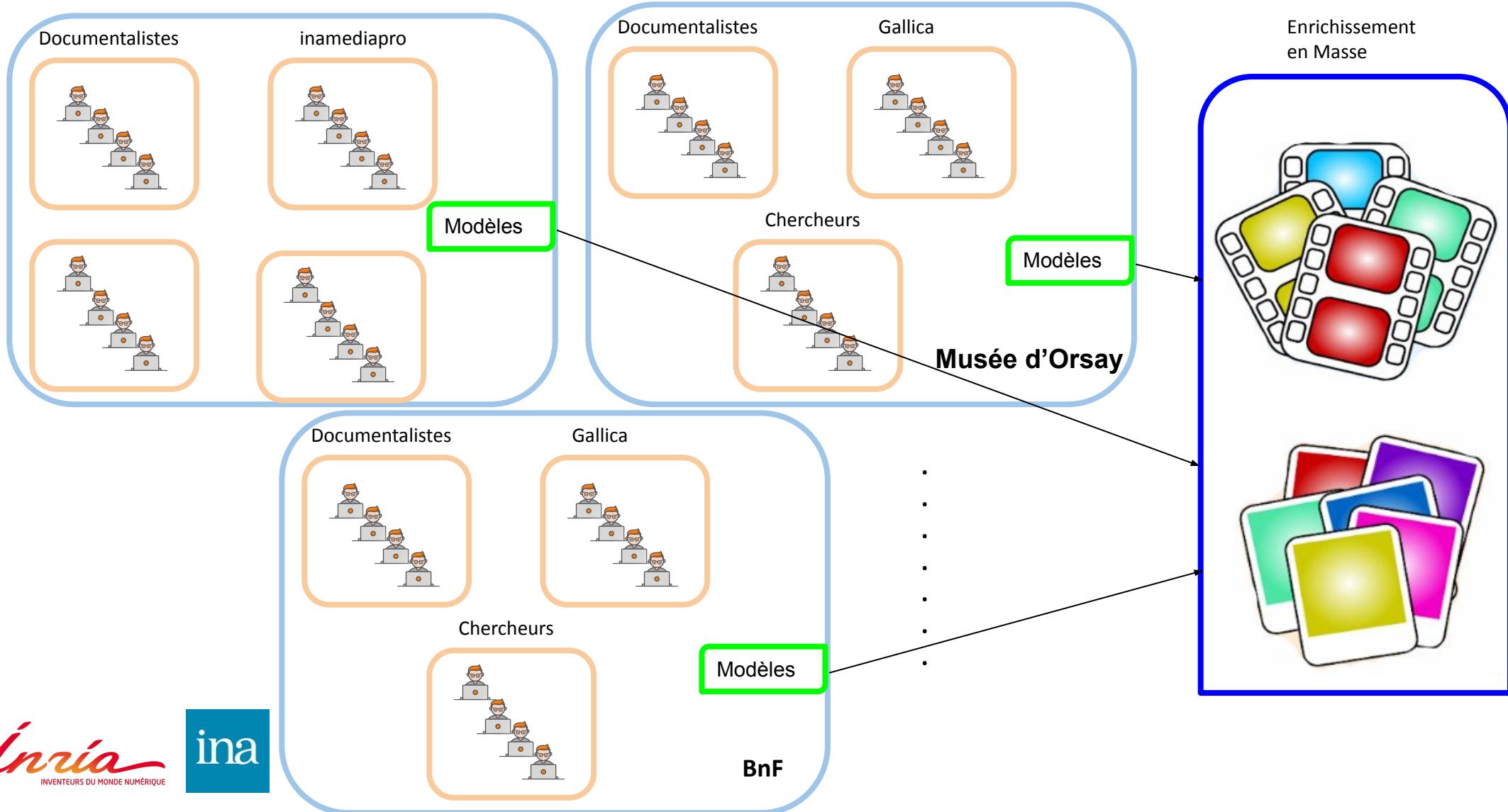
Snoop : Création et Découverte Multi-établissement



Snoop : Découverte et Exploitation Multi-établissement

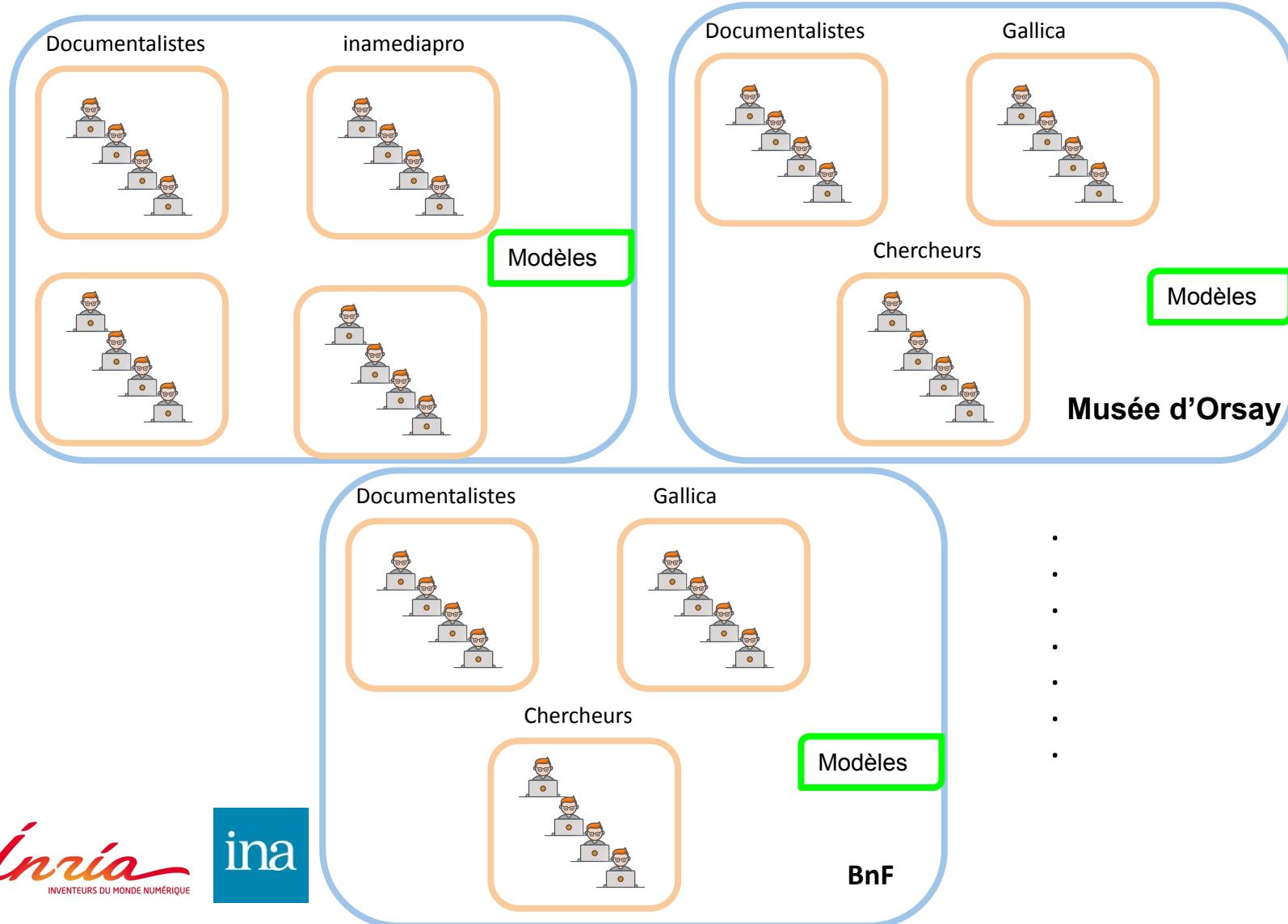


Snoop : Découverte et Exploitation Multi-établissement

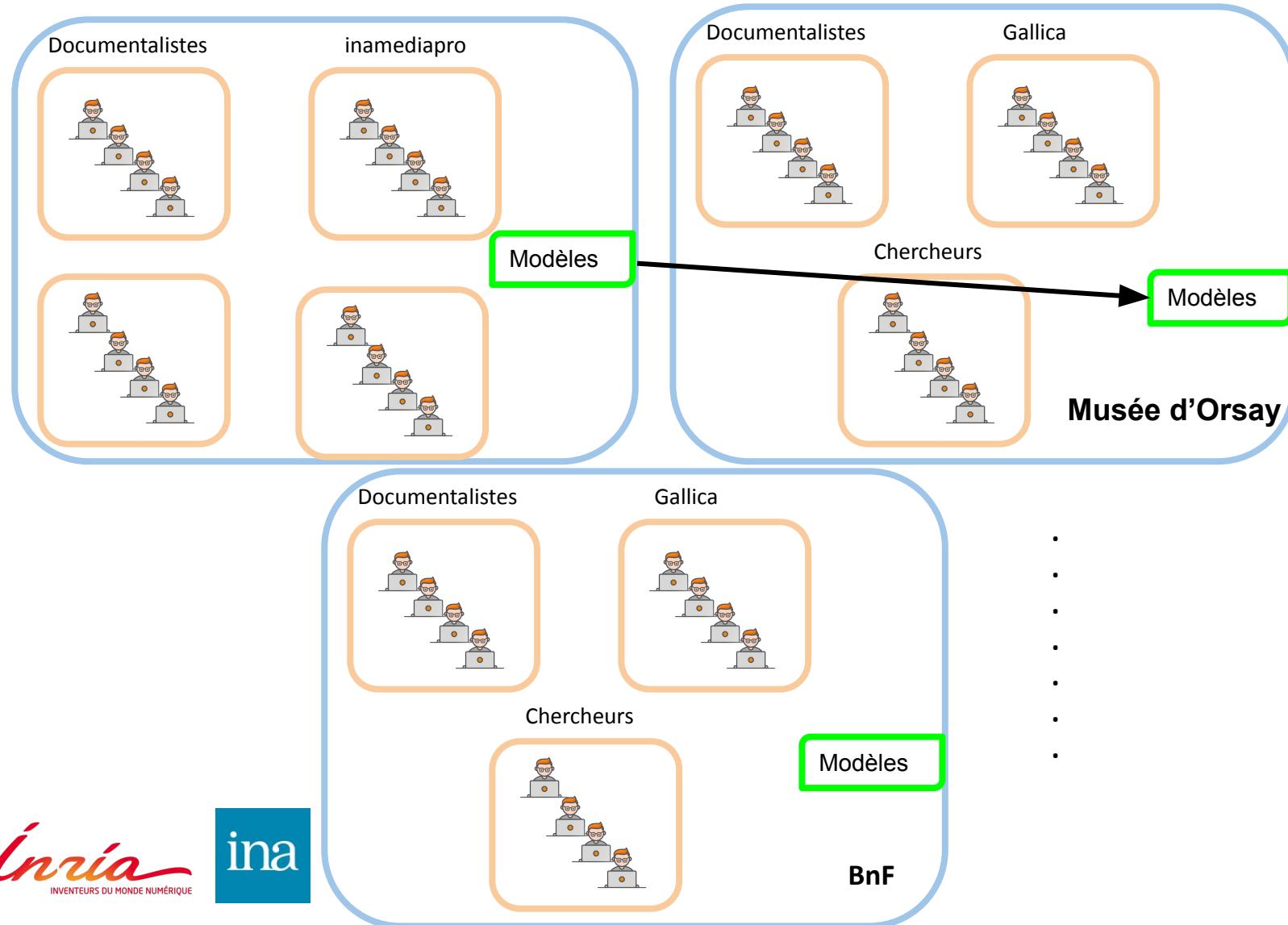


Snoop : Découverte de Modèles Multi-établissement

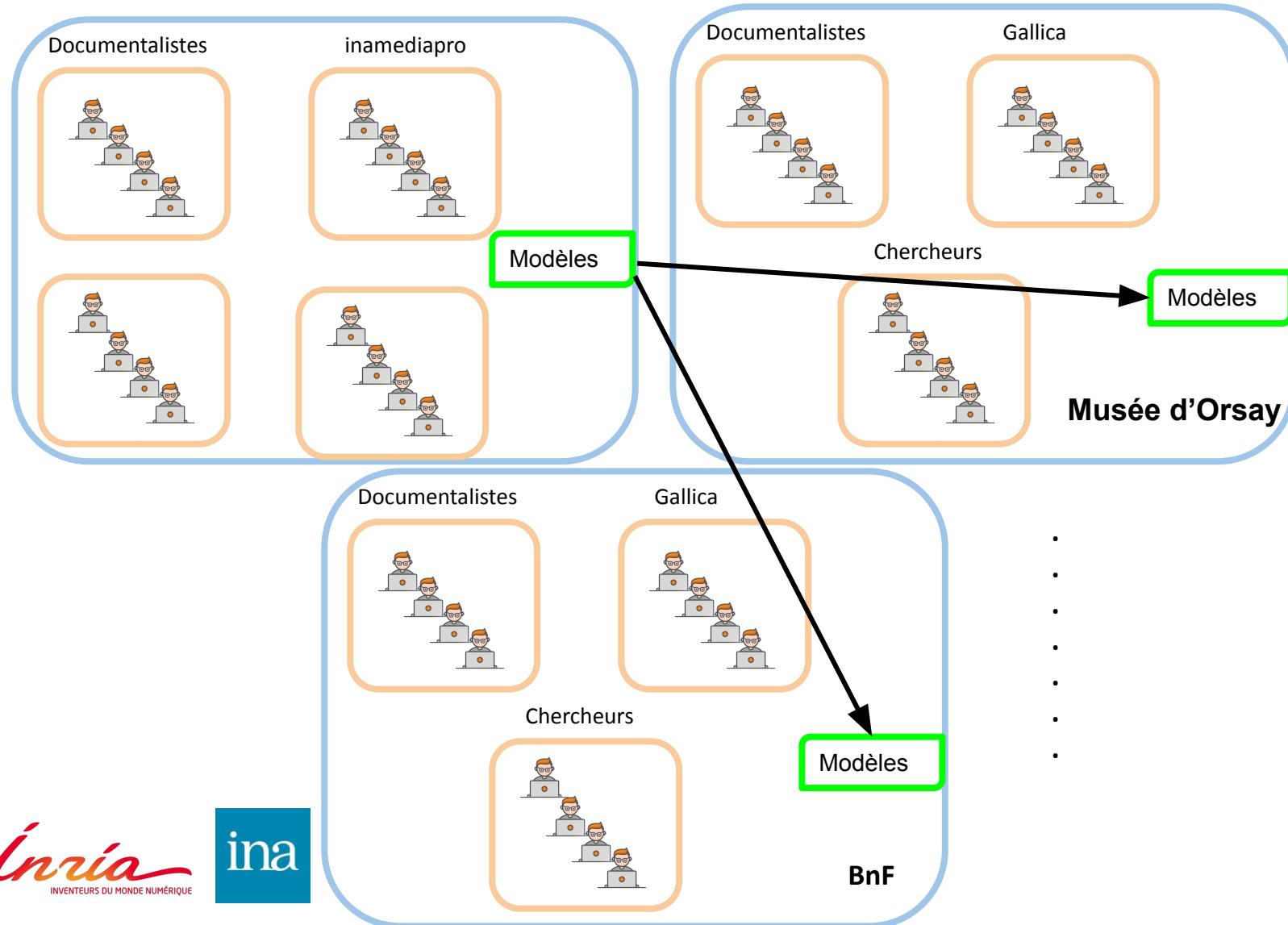
Snoop : Découverte de Modèles Multi-établissement



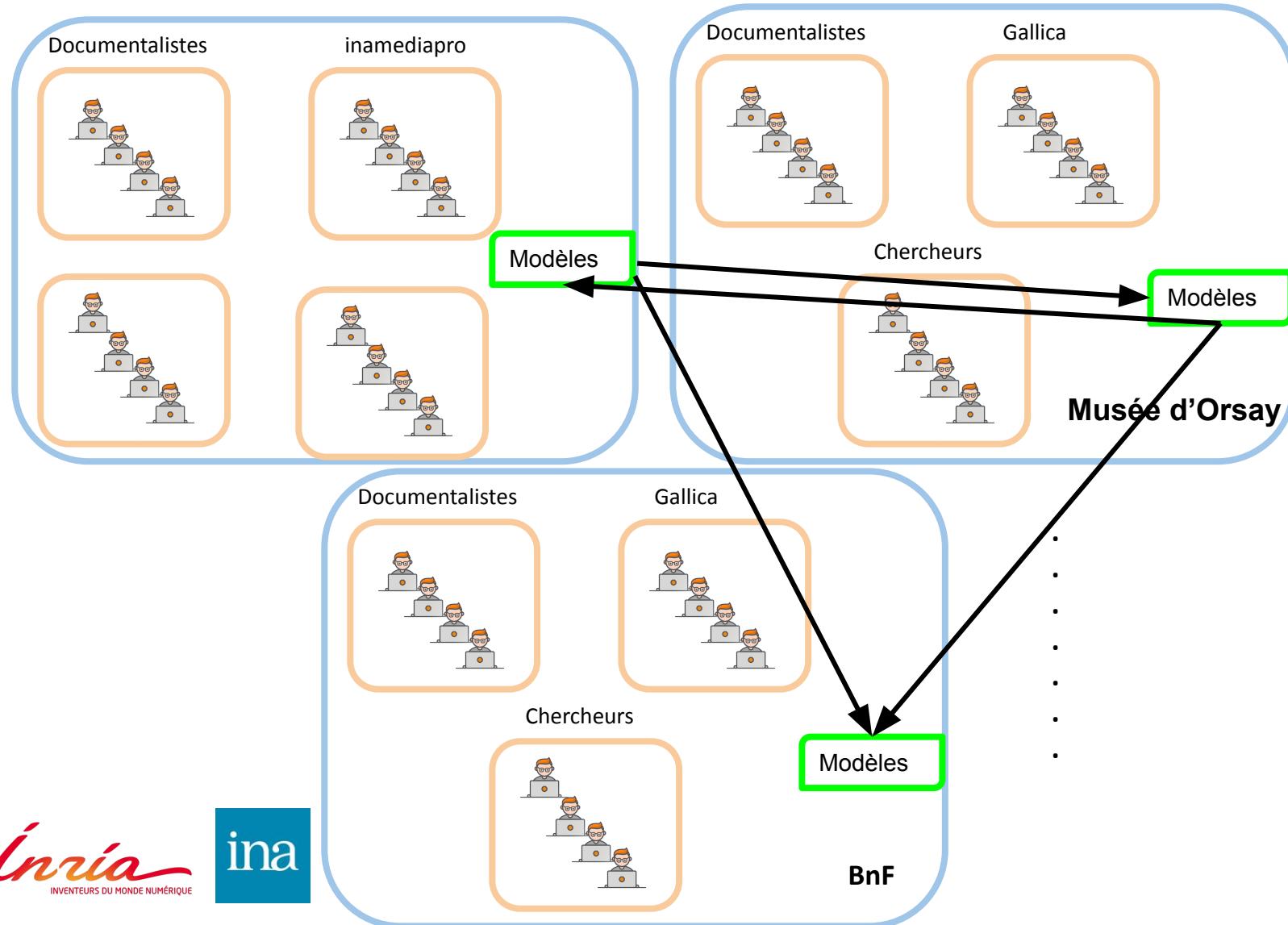
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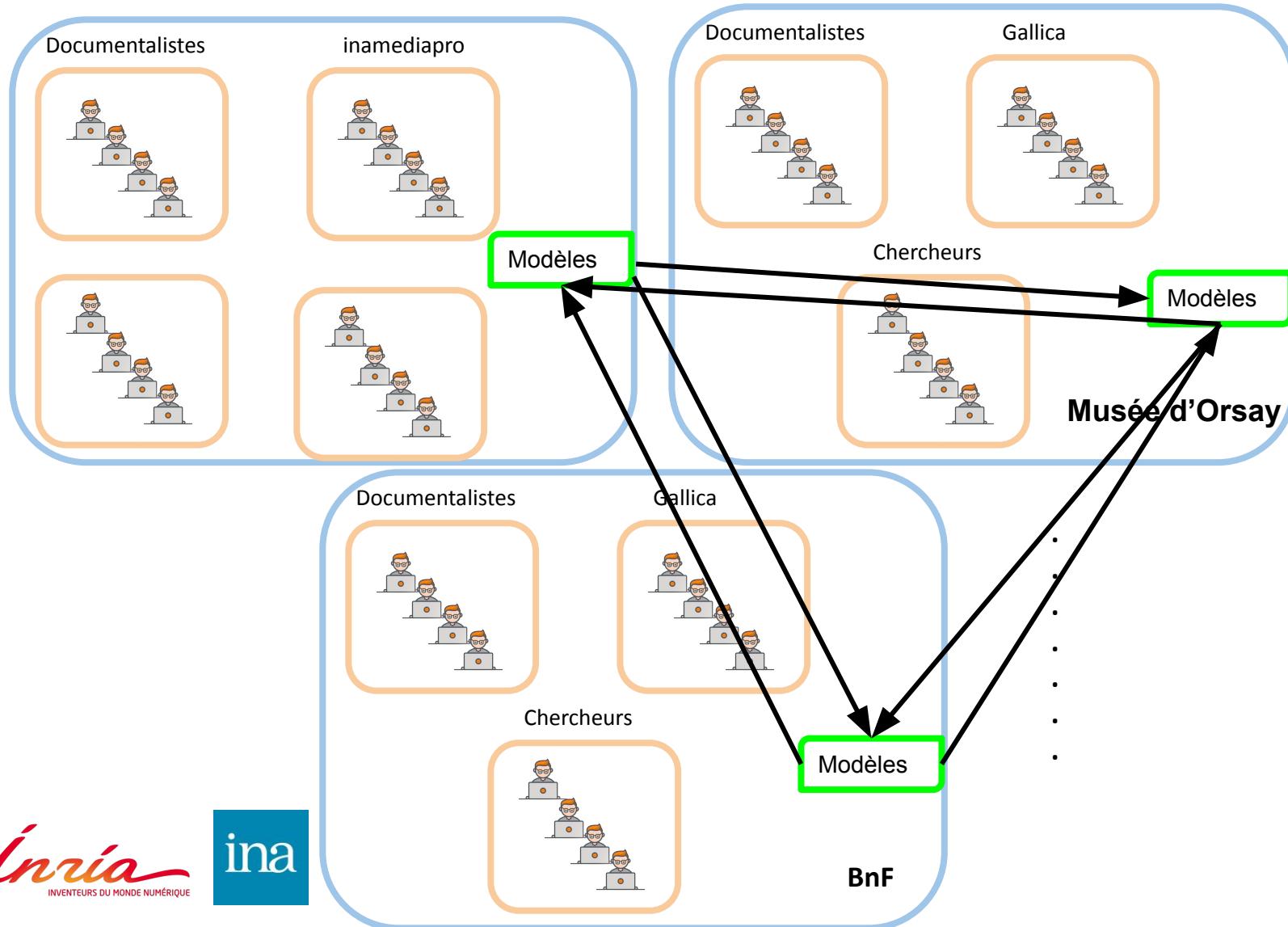
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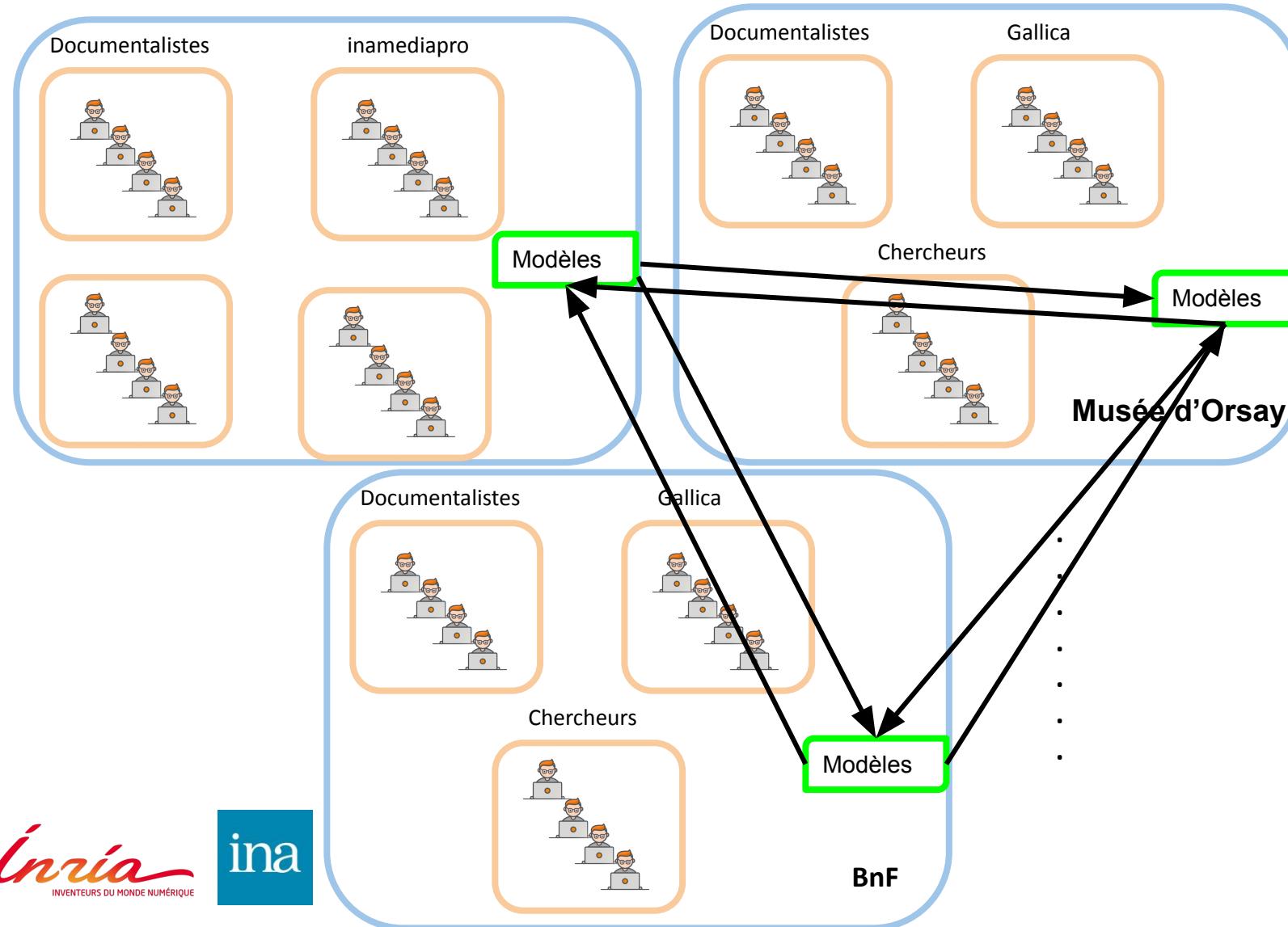
Snoop : Découverte de Modèles Multi-établissement



Snoop : Découverte de Modèles Multi-établissement



Snoop : Découverte de Communautés d'Utilisateurs



Snoop

Search result

50 images



My Classes

admin



Score: 1

Set positive or negative



Create class from this image

Existing classes

Add image to existing class

Hide Search

Classify Random Images



Search

Close

Snoop

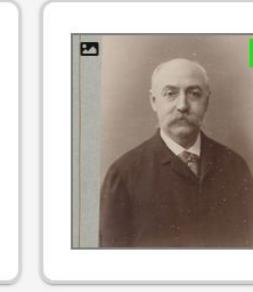


Search result

50 images

Mark as or

Pictures size



Current Selection : 1 Images

[Clear](#)[Most useful](#)[Ambiguous](#)[Search](#)[Discovery](#)[Refine](#)

Default number of result images

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Discovery rate

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Temporal Range

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Sampling Min

 Value : -1

Sampling Max

 Value : 0

Snoop



My Classes

admin



Search result

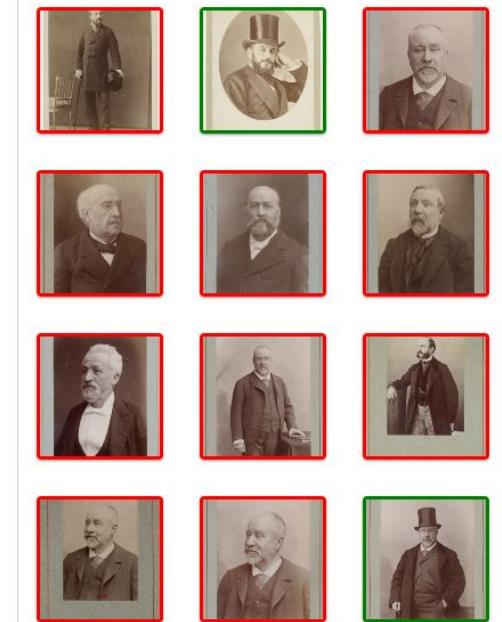
50 images

Mark as or

Pictures size



Current Selection : 14 Images



Clear

Most useful

Discovery

Default number of result images

15

Discovery rate

[Support](#)

ina

1.0.0

Snoop

Search result

50 images



My Classes

admin



Score: 0.8726

Set positive or negative



Create class from this image

Existing classes

Add image to existing class

Search

Close

Discovery rate

[Support](#)

ina

1.0.0

Snoop



My Classes

admin

Search result

50 images



Score: 0.8726

Set positive or negative



Create class from this image

Existing classes

Add image to existing class

Search

Close

Discovery rate

[Support](#)

ina

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Snoop



My Classes

admin

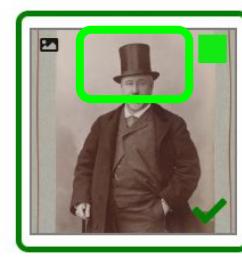
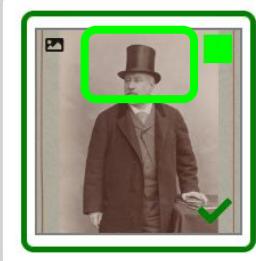


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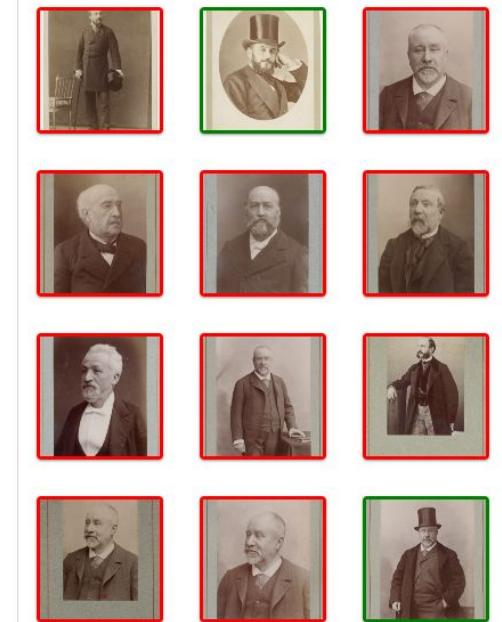
50 images

Mark as or

Pictures size



Current Selection : 14 Images



Clear

Most useful

Discovery

Default number of result images

15

Discovery rate

[Support](#)

ina

1.0.0

