



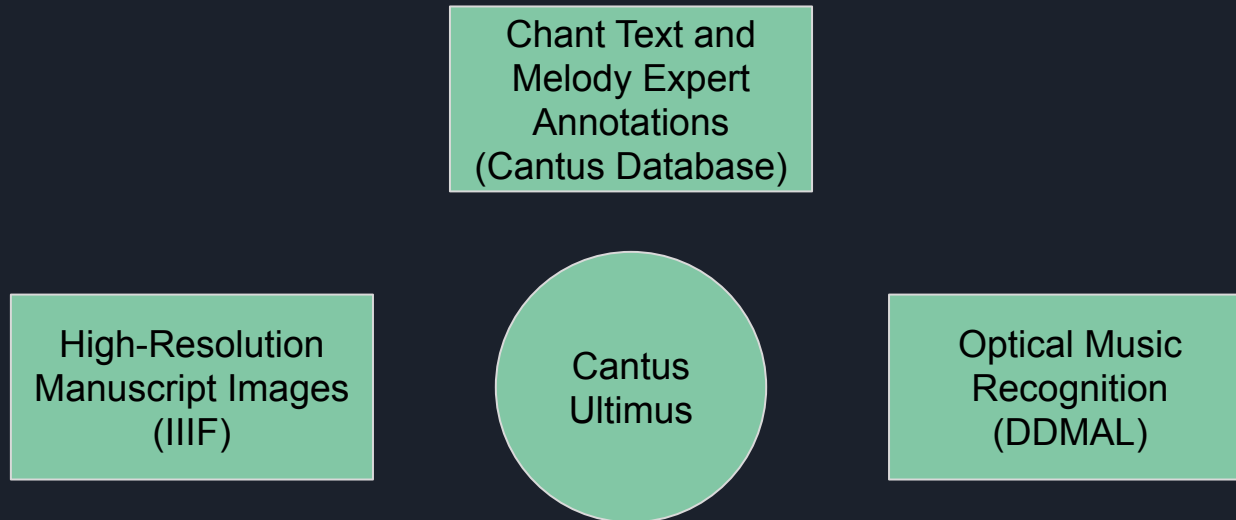
Cantus Ultimus: Status Update

Néstor Nápoles López
SIMSSA Workshop XIX, September 21, 2019



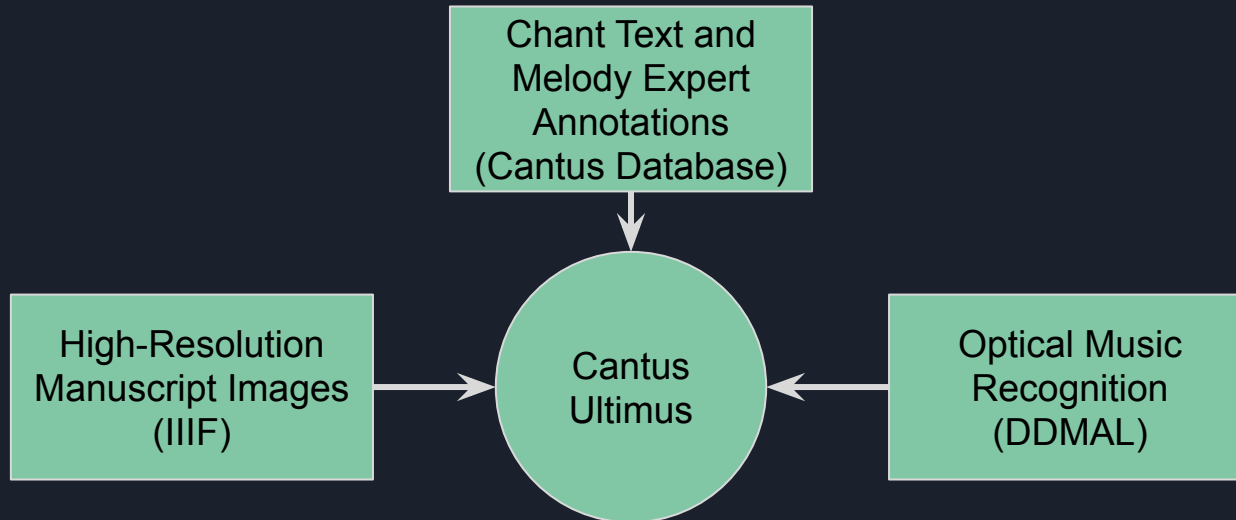
Cantus Ultimus - <https://cantus.simssa.ca>

Take advantage of chants' text and melody databases like the Cantus Manuscript Database (<http://cantus.uwaterloo.ca/>) and combine it with state-of-the-art Optical Music Recognition (OMR) technology to provide a fully-searchable interface of music and text



Cantus Ultimus - <https://cantus.simssa.ca>

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What you should see - <https://cantus.simssa.ca>

The screenshot displays the Cantus Ultimus website interface. The browser address bar shows the URL: cantus.simssa.ca/manuscript/41/?folio=020v&chant=6&search%5Btype%5D=volpiano&search%5Bquery%5D=fefdecdd. The page title is "Cantus Ultimus > Paris, F-Pn lat. 15181". The main content area shows a manuscript page with Latin text and musical notation. The text includes: "Opti obligan tunc et can demit: nos autem luctu nms et ceteri sumus. Do mine saluum fac regem: et caudi nos in die qua iuno cauerimus te. A. Donati in syon salutem et in ierusalem gloria me am alleluia. A. Quis salu nobis saluare: mitte salu as et tribuas uitam temp re proprio. A. Exaudiat te dominus in die tribula tionis. Hoc est: exime A. Et sine sine. cuonac. A. Domine in uiam. cuone. A. Sic iurata tua p. d. Metabitur rex: et sup ta luntate tuum exultabit uer niter. O. et uoluntate la bior eius non fraudasti ei. Om. puenisti eam in bndi doib; dulcedinis pofuiti capite eius corona de lapi de inolo. A. Ita puenit a rca buisti a. longitudo diee in factu et factu factu. A. gna est gla eius in saluati tuo: glam et magni deo et ty nes sup ei. Om. dabis ei in benedictionib; in factu cultu: letificabis eu in gau dio ai uultu tuo. Om. ex sperat in dno: et in mia alit simi non commouebitur. Inueniatur manus tua oib; iuuas tuis: dextera tua". The right sidebar contains a search bar for "Folio 020v (48 of 1124)" and a list of chants including "Ponam in Sion salutem et", "Auxilium nobis saluator mitte salutis", "Exaudiat te dominus in die", "Hoc est*", "Rex sine fine*", "Domine in virtute*", "Cantus ID: 002349", "Sequence: 6", "Feast: Dom. per annum", "Office: Matins", "Genre: Antiphon", "Mode: 8", "Differentia: 1", and "Full Text: Domine in virtute*". At the bottom of the sidebar, there is a musical notation snippet for "Do-mi-ne in-vir-tu-te*".

Cantus Ultimus behind the scenes

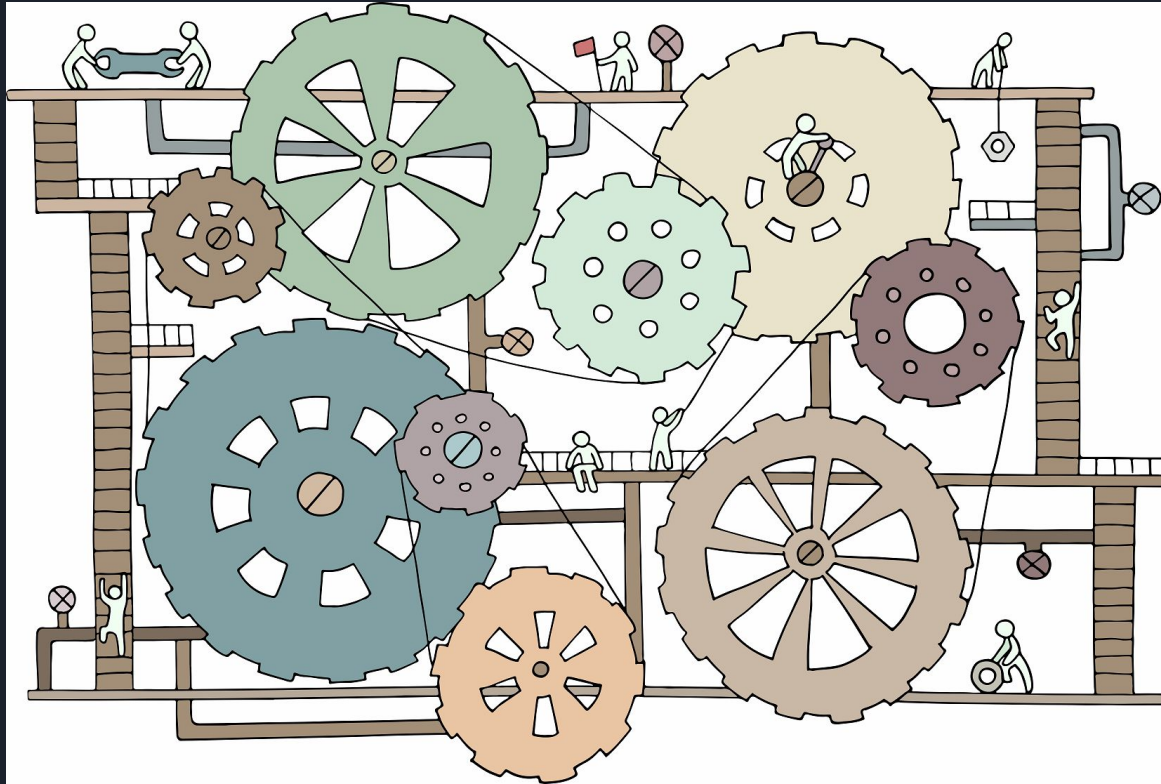


Image obtained with a standard license from:

<https://stock.adobe.com/ca/images/sketch-of-people-teamwork-gears-production-doodle-cartoon-mechanism-with-machinery-and-cogwheels-hand-drawn-vector-illustration-for-business-design-isolated-on-white/98119785>

Cantus Ultimus behind the scenes

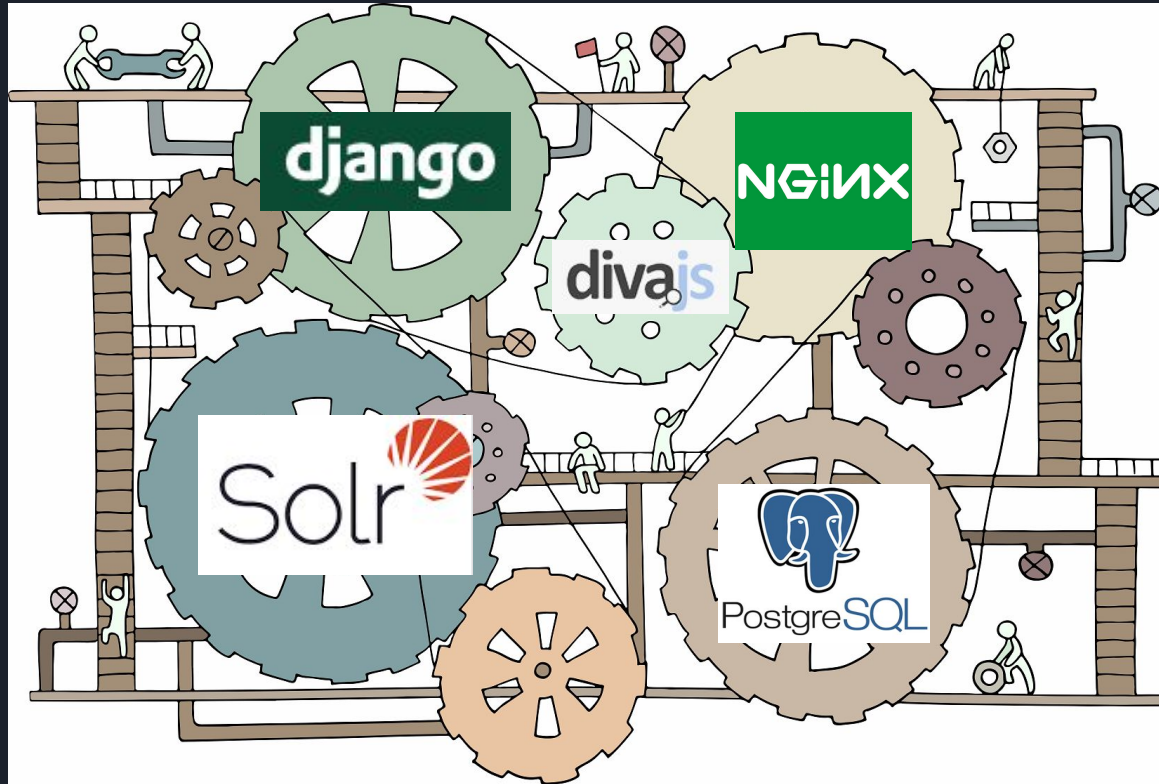


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Cantus Ultimus behind the scenes

me

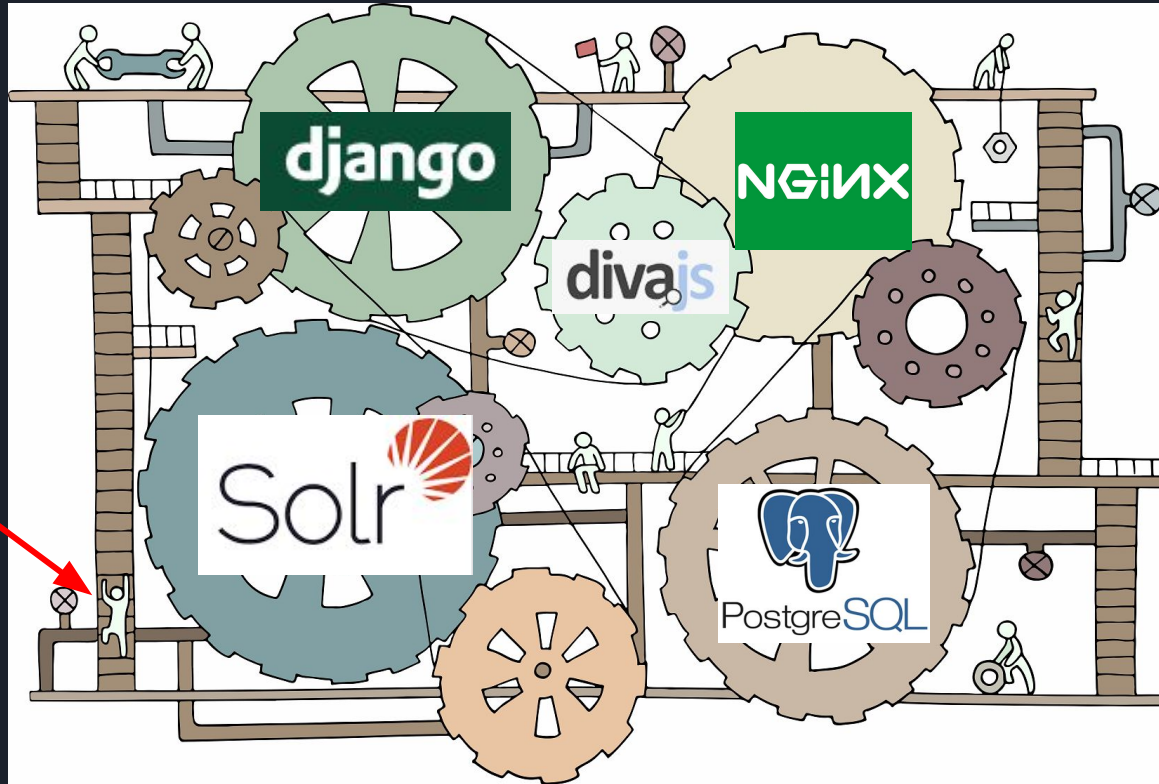


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Our big objective as developers

Make the addition of manuscripts as simple as possible for the users:

- URL to a Cantus Database Source (expert data)
- URL to a IIIF Manifest (high-resolution images)

Connect everything automatically!



Last time in Vienna

Manual mapping of IIF manifests and folio annotations





Last time in Vienna

Automatic mapping of IIF manifests and folio annotations





From June to September

Retaking an old effort started in 2016 by William Bain

- The *containerization* of Cantus Ultimus

Cantus Ultimus

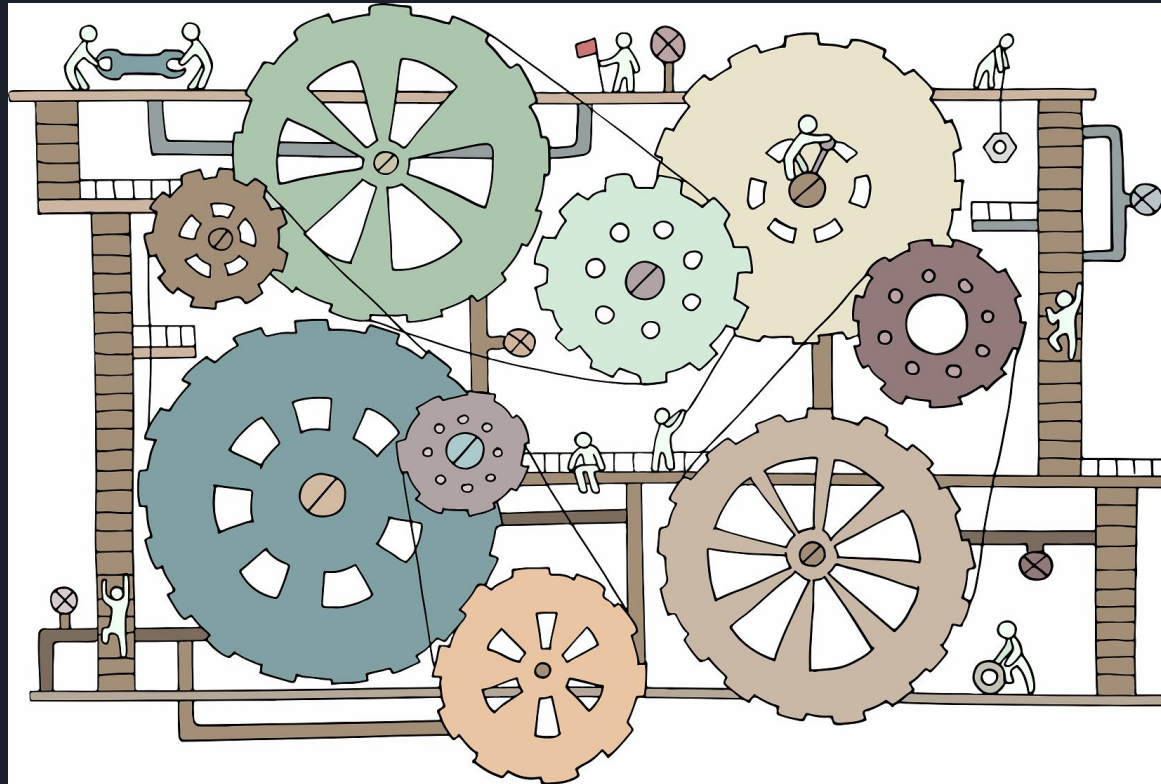
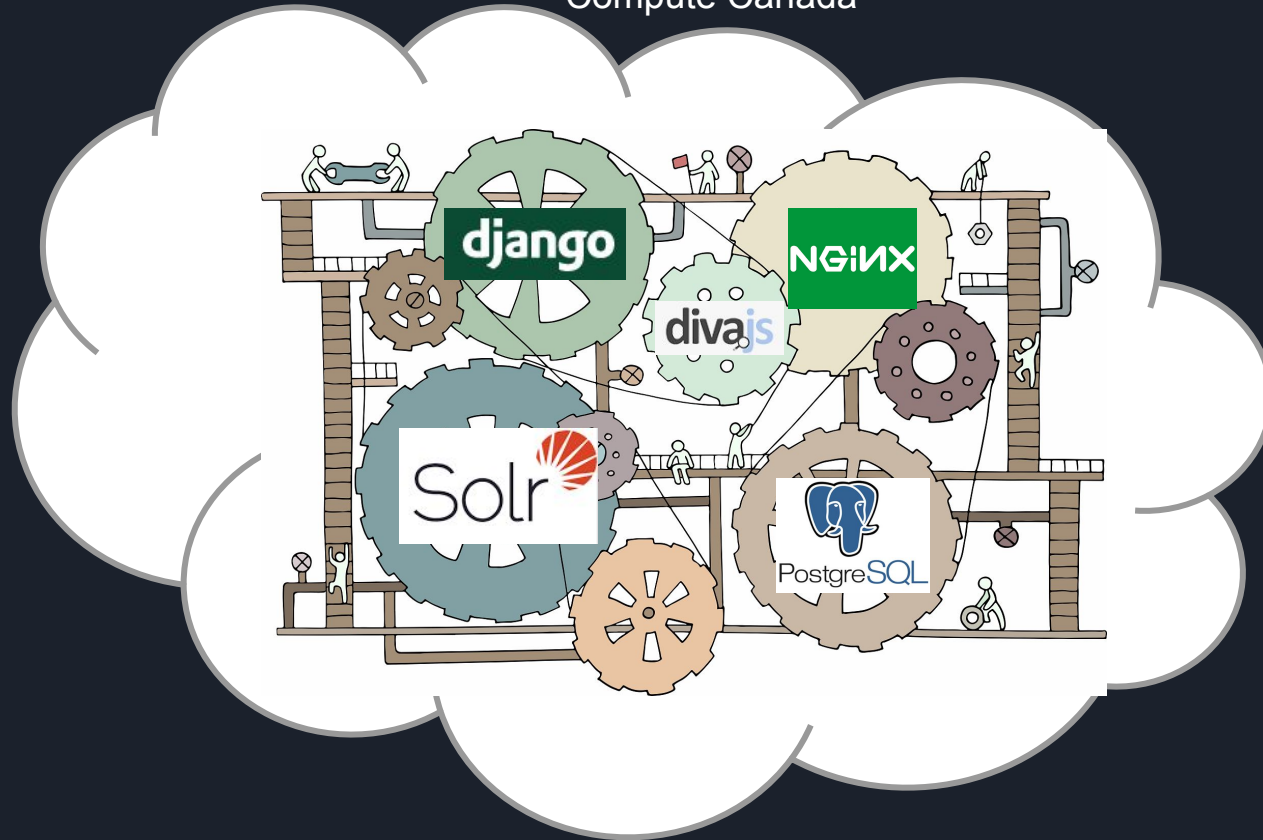


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Cantus Ultimus

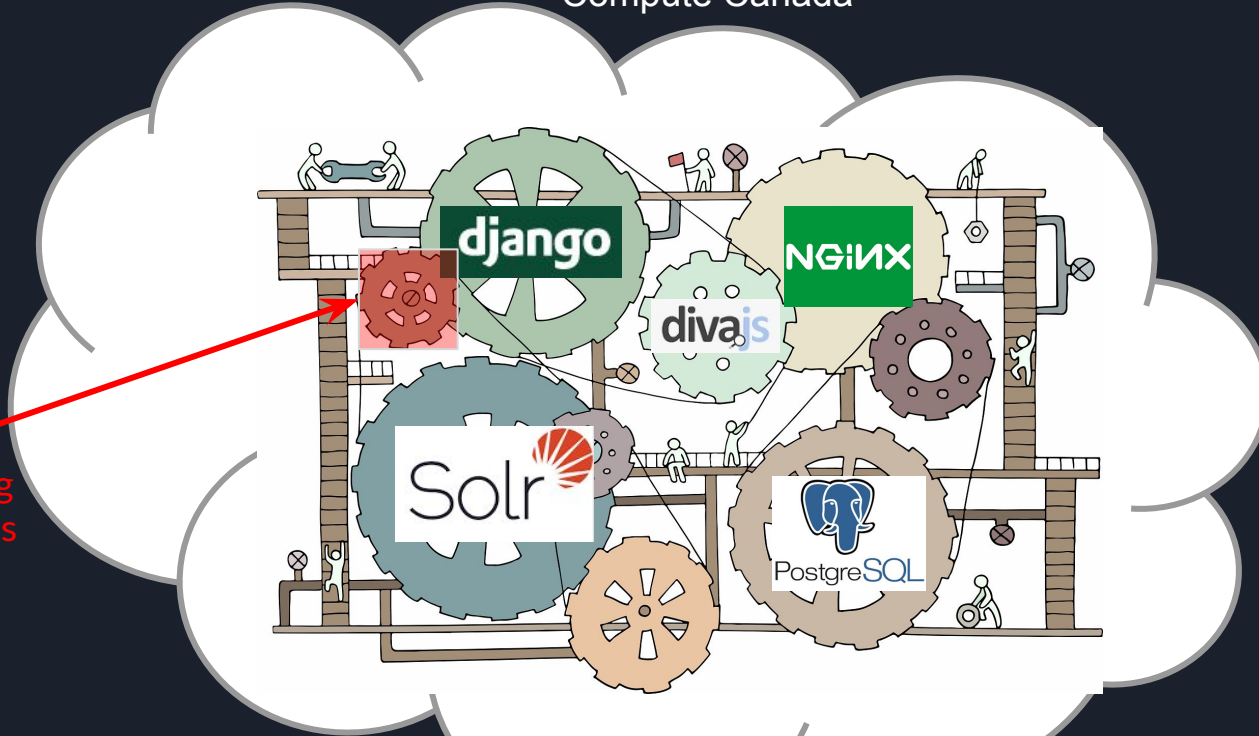
Compute Canada



Cantus Ultimus

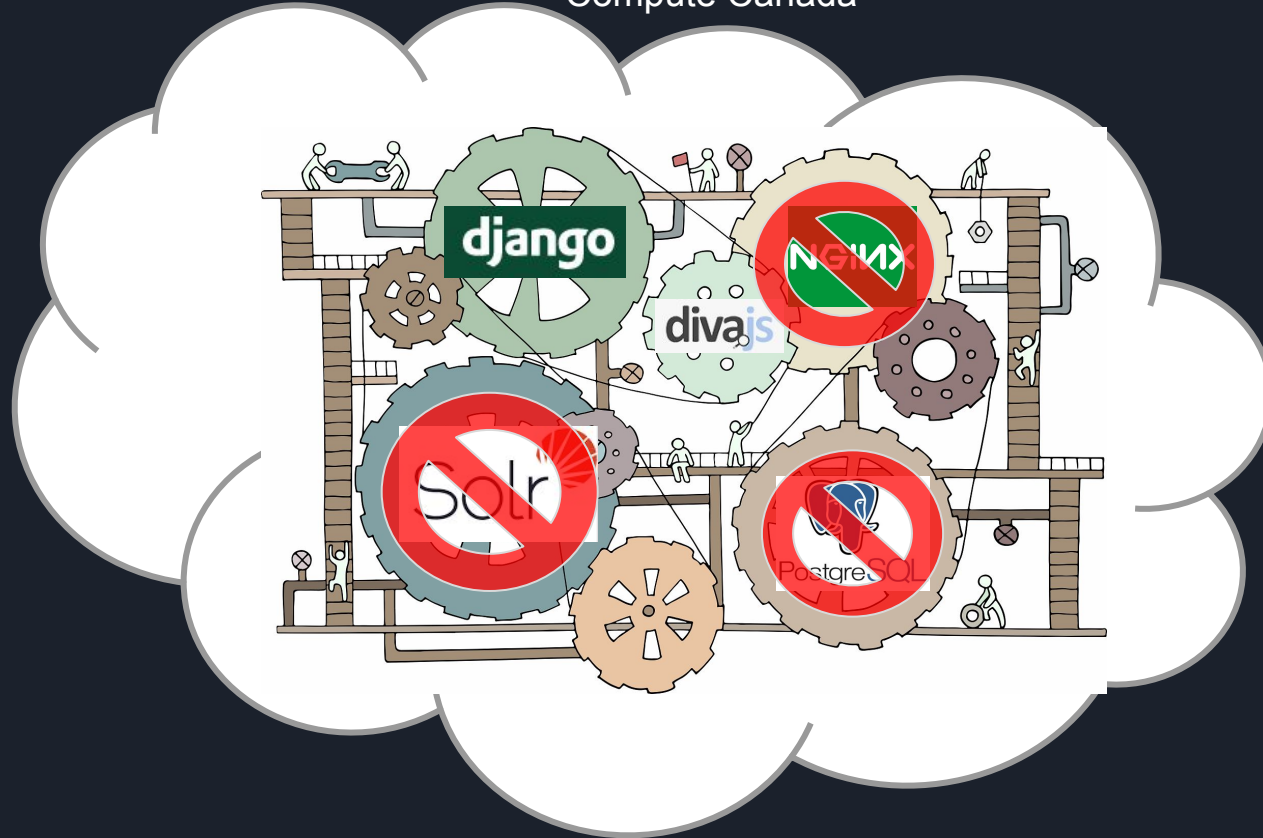
Compute Canada

automatic mapping
of folio annotations
and images



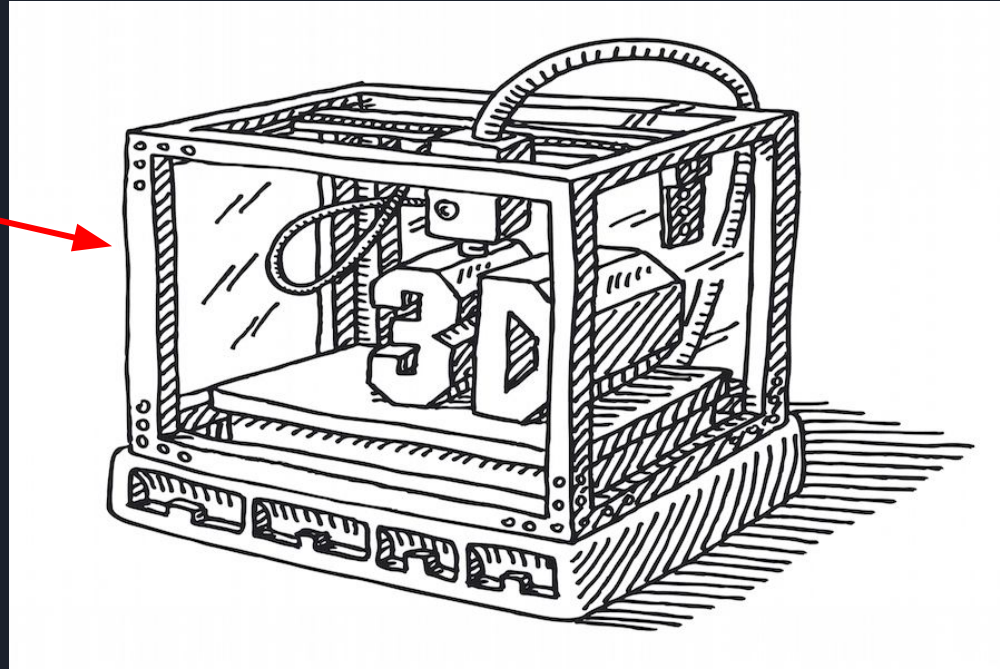
Cantus Ultimus

Compute Canada

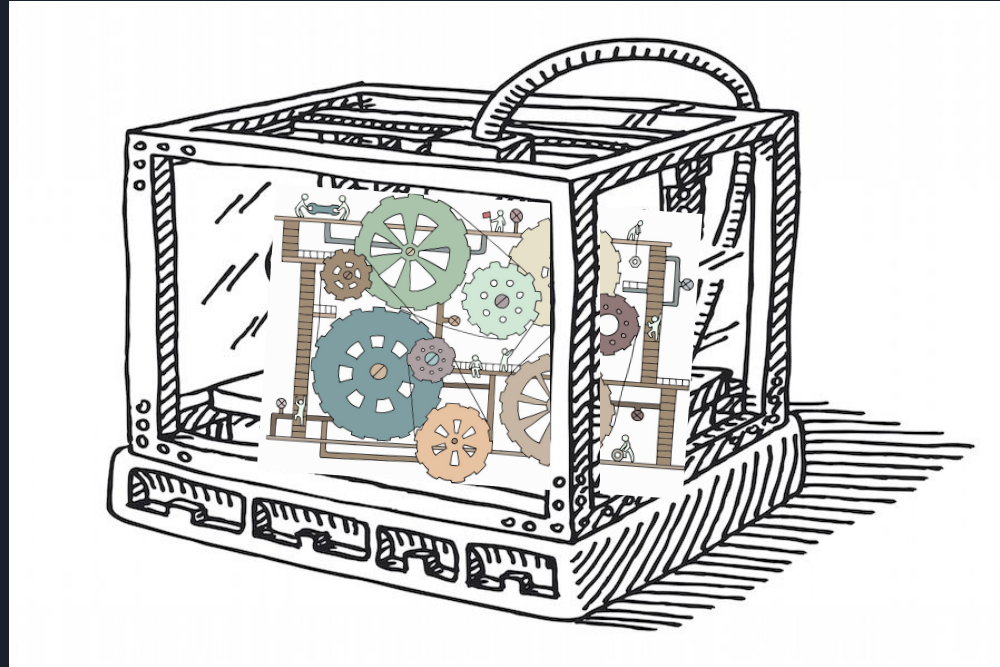


Cantus Ultimus

container

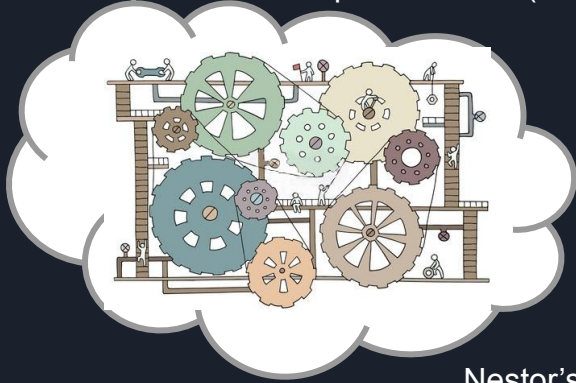


Cantus Ultimus

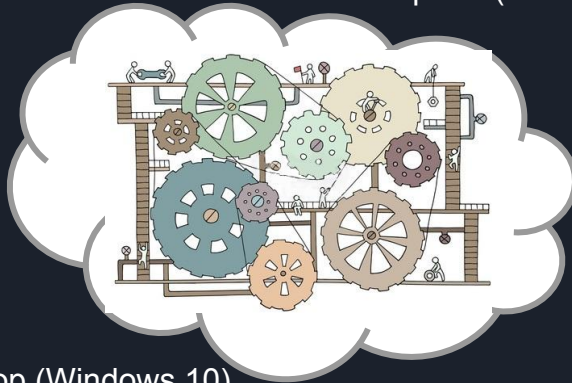


Cantus Ultimus

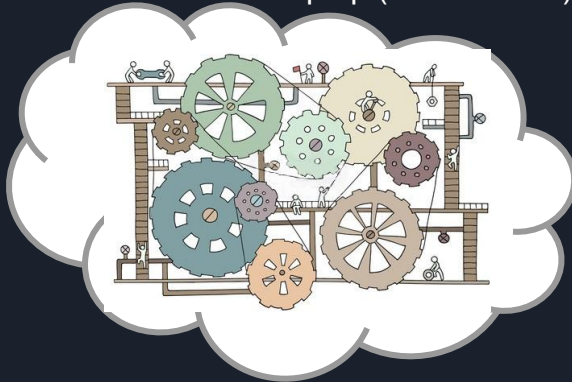
Compute Canada (Linux)



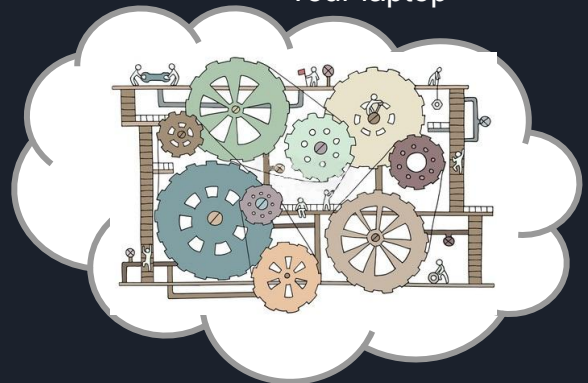
Lab's computer (macOS)



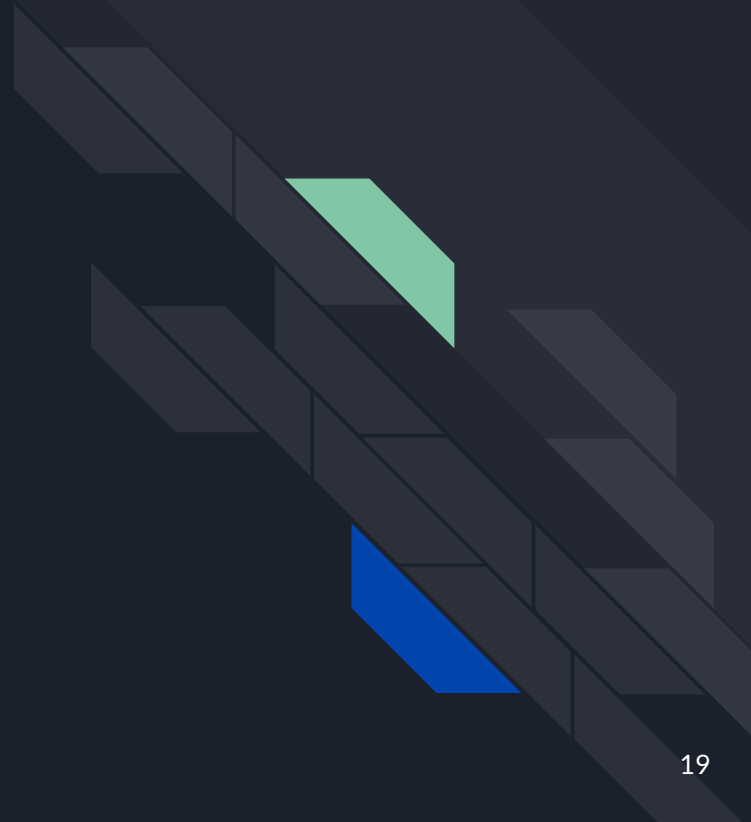
Nestor's laptop (Windows 10)



Your laptop



Cantus Ultimus Container





Purpose

Replicating the complex stack of the Cantus Ultimus Website in a development environment helps us to move in the direction of our original goal:

Make the addition of manuscripts as simple as possible for the users:


- URL to a Cantus Database Source (expert data)
- URL to a IIIF Manifest (high-resolution images)

Connect everything automatically!



Cantus Ultimus - History

- Cantus Ultimus
 - Jennifer Bain
 - Inga Behrendt
 - Julie Cumming
 - Elsa De Luca
 - Ichiro Fujinaga
 - Andrew Hankinson
 - Kate Helsen
 - Alessandra Ignesti
 - Jan Kolářek
 - Debra Lacoste
 - Sarah Ann Long
 - Barbara Swanson
- Cantus Ultimus Website
 - Andrew Horwitz (2014)
 - Initial template of a website (now deprecated)
 - Wei Gao (2014)
 - Started the current version of the website
 - Andrew Fogarty and Andrew Horwitz (2014 - 2015)
 - William Bain (2015 - 2016)
 - Jérôme Parent-Lévesque (2016)
 - Néstor Nápoles López (2018)



Special thanks

Jan Koláček and Jennifer Bain

For their support and for introducing changes in the Cantus Database that will be very helpful in the next deliverable of the project

Thank you

Contribute: <https://github.com/DDMAL/cantus>

or visit the website: <https://cantus.simssa.ca>



Social Sciences and Humanities
Research Council of Canada

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Canada

