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## iDigBio & Zooniverse CITSCribe Hackathon

# Purposeful gaming and BHL: engaging the public in improving and enhancing access to digital texts

**William Ulate R.**

Global BHL Coordinator  
BHL-US/UK Technical Director

Florida, December 16 – 20 , 2013



MISSOURI BOTANICAL GARDEN



INSTITUTE of  
Museum and Library  
SERVICES



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# Project objectives and benefits

- Test new means of crowdsourcing to support the enhancement of content in BHL
- Demonstrate if digital games are an effective tool for analyzing and improving digital outputs from OCR and transcription
- Benefits of gaming include:
  - improved access to content by providing richer and more accurate data;
  - an extension of limited staff resources; and
  - exposure of library content to communities who may not know about the collections otherwise.



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# Purposeful Gaming and BHL

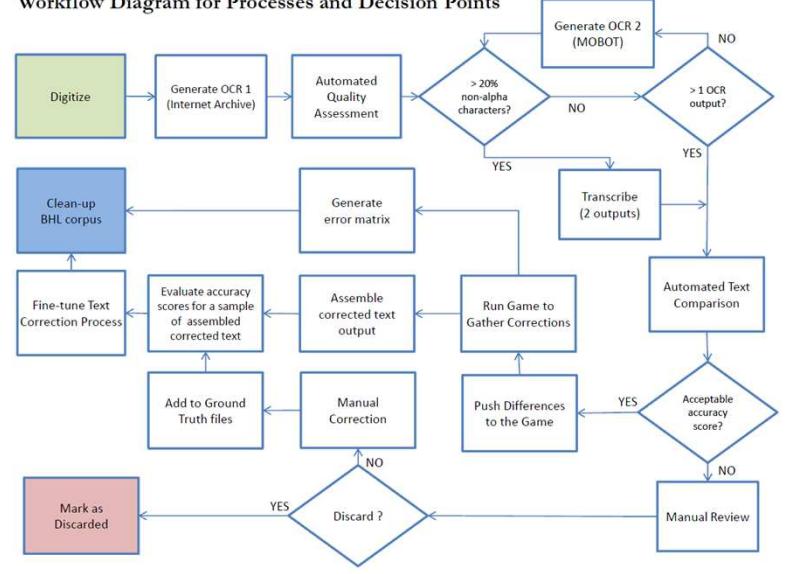
The image shows two side-by-side screenshots of the Biodiversity Heritage Library (BHL) digital library interface. The left screenshot displays a handwritten letter from Plainville, Conn., dated March 2d / 101, addressed to Mr. Deane. The right screenshot shows a page from Dreer's autumn catalogue from 1896, featuring illustrations of various plants and flowers.

## Digitalkoot



Missouri Botanical Garden  
Harvard University  
Cornell University  
New York Botanical Garden

Workflow Diagram for Processes and Decision Points





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# Purposeful Gaming and BHL



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PbsTA^j^HEC

pa^gspg^l

S SIDE IS

X^S

ADt>!

Correspondence relating to preliminary lists of New England plants, 1897-1904 (inclusive)

Plainville Conn Mar 2d /101

My Dear Mr. Deane

Glad to hear from you - am sending you with this specimen of *Holura glauca* from this state cannot send *Eryngodium foetidum* footragaria the only station I have is morris and now cannot cite authority without looking up many old notes from correspondents am very busy now on M. S. of a new revisionary State catalogue of plants to be issued soon will be completed if not too late shall be glad to look it up for you Hastily James A. Bicknell

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Dreer's autumn catalogue : 1896 bulbs, plants, seeds.

Pages

- Page 7
- Page 8
- Page 9
- Page 10
- Page 11
- Page 12**
- Page 13
- Page 14
- Page 15
- Page 16
- Page 17

URL for Current Page <http://biodiversitylibrary.org/page/42697194>

Scientific Names on this Page

Page 12

**Bulbocodium** Col.  
**Gardenia**  
**Polyanthus**  
**Sion**

Incomparable (Butter and Eggs). Orange and yellow; of large size and good shape. 20 cts. per doz., \$1.25 per 100.

Orange Phoenix (Eggs and Bacon). Light crimson and orange; an excellent flower for forcing. 5 cts. each, 40 cts. per doz., \$3 per 100.

Alba Plena Odorata (Pintow plow). Gardenia Daffidil. Double, pure white; very sweet-scented. This beautiful variety cannot be forced, but millions are grown in the open ground for supplying the cut-flower markets of Europe. 20 cts. per doz., \$1 per 100, \$6.50 per 1000.

Hoop Petticoat Narcissus.

**Bulbocodium**. Exceedingly pretty flowers, of a rich, golden yellow. It is a gem for pot-culture and edgings, and bears from 6 to 12 flowers to each bulb. 5 cts. each, 50 cts. per doz., \$4 per 100.

**Bulbocodium Monophyllum** (One). Pure white; very early blooming. 5 cts. each, 50 cts. per doz., \$4 per 100.

**Big** Special attention is directed to our set of Six Superl Narcissus shown in colors on the cover of this catalogue and offered on page 10.

For planting among shrubbery or in mixed borders, where they may remain for years; you may select these, are, without doubt, one of the best of the hardy bulbs, coming into bloom easily, and replying an unfailing source for cut flowers; should be planted extensively in borders, either alone or with the single sorts offered on preceding page. 20 cts. per doz., \$1 per 100, \$8 per 1000.

Special Low Offer of Mixed Double Daffodils.

For planting among shrubbery or in mixed borders, where they may remain for years; you may select these, are, without doubt, one of the best of the hardy bulbs, coming into bloom easily, and replying an unfailing source for cut flowers; should be planted extensively in borders, either alone or with the single sorts offered on preceding page. 20 cts. per doz., \$1 per 100, \$8 per 1000.

**Double Trumpet Van Sode.**

**Polyanthus Narcissus.**

Basiful, free flowering, deliciously sweet-scented flowers, of the easiest culture; suitable for forcing or for garden decoration. They bear tall spikes of bloom, with from 6 to 20 flowers each. Bulbs planted in the open border in October and November stand the winter with slight protection.

**Early Double Roman.** White, with orange center; very fragrant. 5 cts. each, 25 cts. per doz., \$1 per 100.

**Grand Monarque.** One of the loveliest perfume shades; a very effective flower. 8 cts. each, 50 cts. per doz.

**Grand Prime.** Cap crimson, perianth pure white; excellent for cutting. 8 cts. each, 50 cts. per doz.

**Grand Soleil d'Or.** A charming rich yellow flower, with deep, red, rich cap. Thousands of this variety are grown in sale in the London market. 5 cts. each, 35 cts. per doz., \$2.50 per 100.

**Paper White.** The prettiest early forcing variety; snow-white. Can be had in flower from November to March with a little care. 5 cts. each.

**Paper White.** The flowers are star-shaped, very beautiful, and emit a

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Special Low Offer of

Hoop Petticoat Narcissus.

Hoop Petticoat

Narcissus.

Bulbocodium. Exceedingly pretty flowers, of a rich, golden yellow. It is a gem for pot-culture and edgings, and bears from 6 to 12 flowers to each bulb. 5 cts. each, 50 cts. per doz., \$1

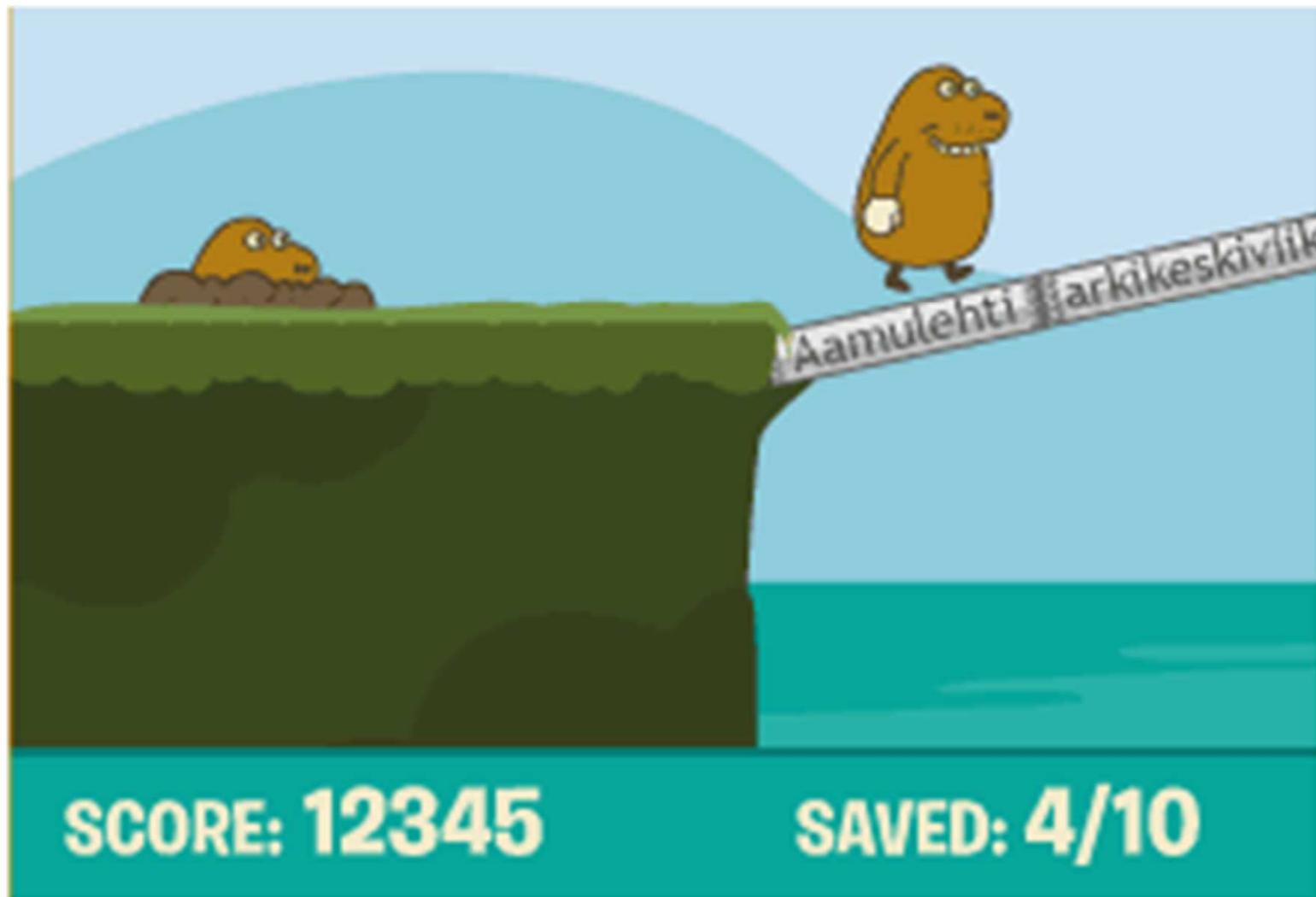
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Scielo



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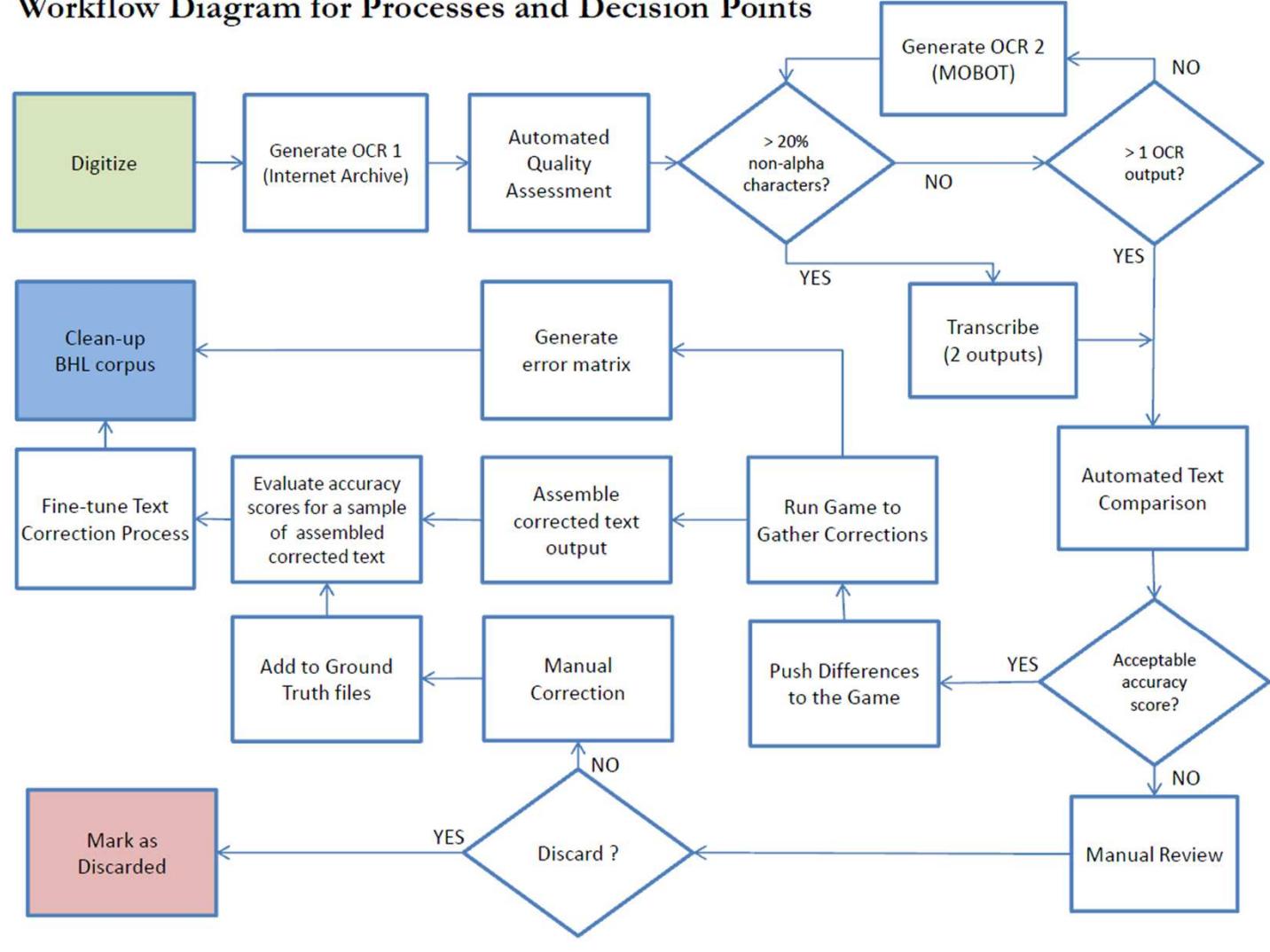


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# Purposeful Gaming

## Workflow Diagram for Processes and Decision Points





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# OCR Improvements

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Sämmtliche Giftgewächse Deutschlands : naturgetren dargestellt und allgemein fasslich beschrieben / von ...

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unb auf den Gebirgen des füdlicher

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unb auf ben Â@elnrgen be6 fublic{}en

German text interpreted by the OCR process as:

“unb auf ben Â@elnrgen be6 fublic{}en”



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# OCR Improvements

		IA OCR	OCR 2	Transcription 1	Transcription 2	
1		unb	und	und	und	Ok
2		den	ben	den	den	Ok
3		Â©elnrgen	Â©ebirgen	Bebirgen	Gebirgen	X
4		be6	des	de5	des	Chk
5		public{}en	publichen	Füdlichen	Südlichen	X
6		Â£)eittfc{}(anb6	Deutfchlanbs	Deutfchlands	Deutschlands	X

Different resulting texts from parsing the phrase:  
**“und auf den Gebirgen des südlichen Deutschlands”**

(“and on the mountains of southern Germany”)

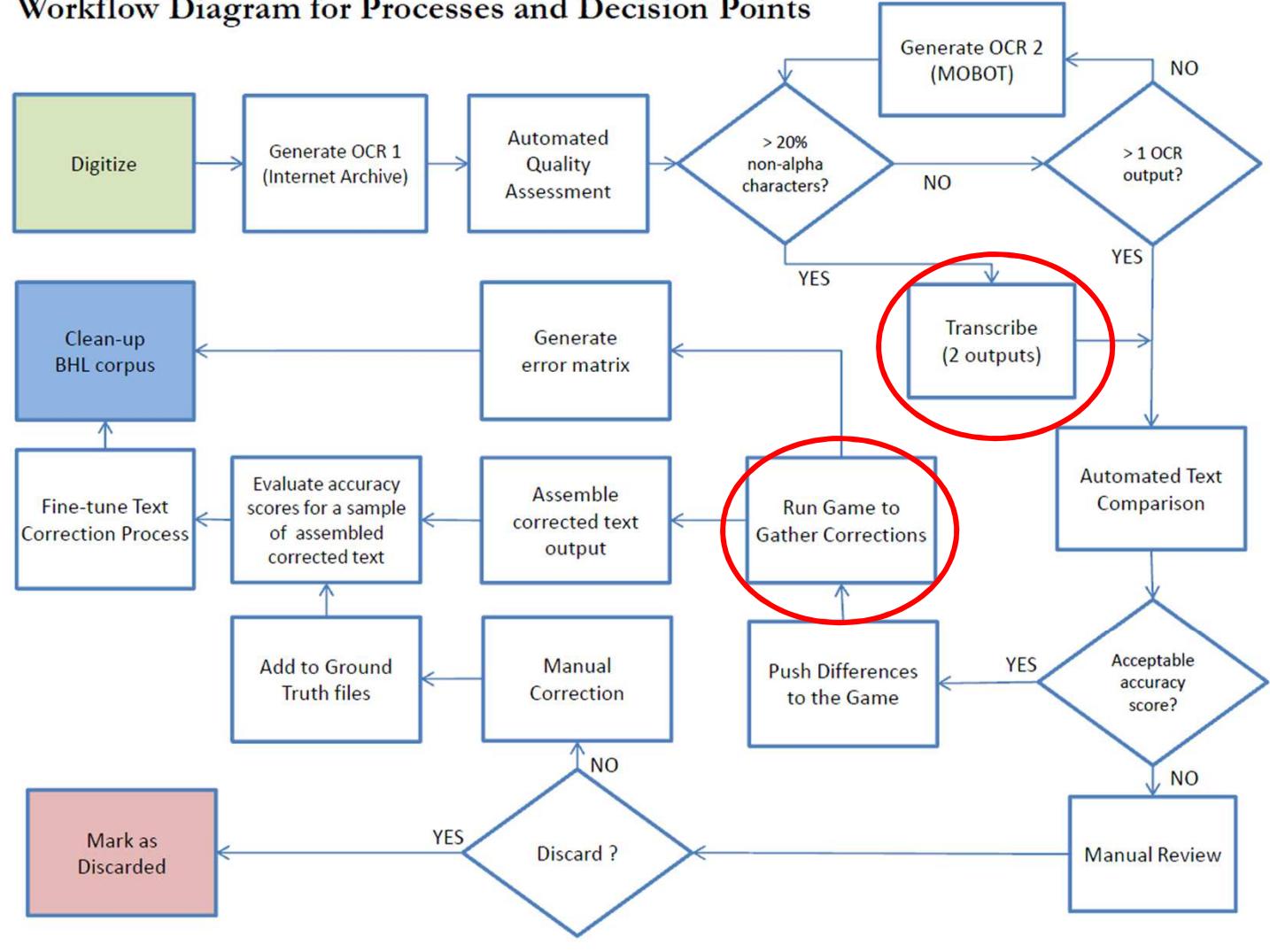


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SciELO



BHL-China



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Biodiversity Heritage Library  
EUROPE



Biodiversity Heritage Library



BHL  
AFRICA

2013 iDigBio Transcription Hackathon  
December 16 -20, 2013

# Thank you

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