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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549

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**SCHEDULE 13D**  
**(Amendment No. 9)\***

Under the Securities Exchange Act of 1934

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**INTREXON CORPORATION**

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(Name of Issuer)

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Common Stock

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(Title of Class of Securities)

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46122T102

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(CUSIP Number)

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Third Security, LLC  
1881 Grove Avenue  
Radford, Virginia 24141  
Attention: Marcus E. Smith, Esq.  
(540) 633-7900

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(Name, Address and Telephone Number of Person  
Authorized to Receive Notices and Communications)

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Copy to:  
John Owen Gwathmey, Esq.  
David I. Meyers, Esq.  
Troutman Sanders LLP  
Troutman Sanders Building  
1001 Haxall Point  
Richmond, Virginia 23219  
(804) 697-1239

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May 24, 2019

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(Date of Event which Requires Filing of this Statement)

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If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(b)(3) or (4), check the following box .

**NOTE:** Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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<b>1</b>	<b>NAMES OF REPORTING PERSONS</b> <b>I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)</b>  RANDAL J. KIRK	
<b>2</b>	<b>CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP</b> (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
<b>3</b>	SEC USE ONLY	
<b>4</b>	<b>SOURCE OF FUNDS (SEE INSTRUCTIONS)</b>  PF	
<b>5</b>	<b>CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(D) OR 2(E)</b> <input type="checkbox"/>	
<b>6</b>	<b>CITIZENSHIP OR PLACE OF ORGANIZATION</b>  United States	
<b>NUMBER OF SHARES          BENEFICIALLY          OWNED BY EACH          REPORTING PERSON          WITH</b>	<b>7</b>	<b>SOLE VOTING POWER</b> 72,179,353
	<b>8</b>	<b>SHARED VOTING POWER</b> 0
	<b>9</b>	<b>SOLE DISPOSITIVE POWER</b> 72,179,353
	<b>10</b>	<b>SHARED DISPOSITIVE POWER</b> 0
<b>11</b>	<b>AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON</b> 72,179,353	
<b>12</b>	<b>CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)</b> <input type="checkbox"/>	
<b>13</b>	<b>PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)</b> 44.8%	
<b>14</b>	<b>TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)</b>  IN	

<b>1</b>	<b>NAMES OF REPORTING PERSONS</b> <b>I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)</b> <b>R.J. KIRK DECLARATION OF TRUST</b> <b>31-6661283</b>	
<b>2</b>	<b>CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP</b> (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
<b>3</b>	<b>SEC USE ONLY</b>	
<b>4</b>	<b>SOURCE OF FUNDS (SEE INSTRUCTIONS)</b> <b>PF</b>	
<b>5</b>	<b>CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(D) OR 2(E)</b> <input type="checkbox"/>	
<b>6</b>	<b>CITIZENSHIP OR PLACE OF ORGANIZATION</b> <b>United States</b>	
<b>NUMBER OF SHARES  BENEFICIALLY  OWNED BY EACH  REPORTING PERSON  WITH</b>	<b>7</b>	<b>SOLE VOTING POWER</b> 17,534,241
	<b>8</b>	<b>SHARED VOTING POWER</b> 0
	<b>9</b>	<b>SOLE DISPOSITIVE POWER</b> 17,534,241
	<b>10</b>	<b>SHARED DISPOSITIVE POWER</b> 0
<b>11</b>	<b>AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON</b> 17,534,241	
<b>12</b>	<b>CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)</b> <input type="checkbox"/>	
<b>13</b>	<b>PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)</b> 10.9%	
<b>14</b>	<b>TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)</b> <b>OO - trust</b>	

<b>1</b>	<b>NAMES OF REPORTING PERSONS</b> <b>I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)</b> THIRD SECURITY, LLC I.R.S. IDENTIFICATION NO.: 54-1923091	
<b>2</b>	<b>CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP</b> (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
<b>3</b>	SEC USE ONLY	
<b>4</b>	<b>SOURCE OF FUNDS (SEE INSTRUCTIONS)</b> WC	
<b>5</b>	<b>CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(D) OR 2(E)</b> <input type="checkbox"/>	
<b>6</b>	<b>CITIZENSHIP OR PLACE OF ORGANIZATION</b> Virginia	
<b>NUMBER OF SHARES          BENEFICIALLY          OWNED BY EACH          REPORTING PERSON          WITH</b>	<b>7</b>	<b>SOLE VOTING POWER</b> 54,492,677
	<b>8</b>	<b>SHARED VOTING POWER</b> 0
	<b>9</b>	<b>SOLE DISPOSITIVE POWER</b> 54,492,677
	<b>10</b>	<b>SHARED DISPOSITIVE POWER</b> 0
<b>11</b>	<b>AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON</b> 54,492,677	
<b>12</b>	<b>CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)</b> <input type="checkbox"/>	
<b>13</b>	<b>PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)</b> 33.8%	
<b>14</b>	<b>TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)</b> OO – limited liability company	

<b>1</b>	<b>NAMES OF REPORTING PERSONS</b> <b>I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)</b> <b>THIRD SECURITY CAPITAL PARTNERS V, LLC</b> <b>I.R.S. IDENTIFICATION NO.: 52-2395642</b>	
<b>2</b>	<b>CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP</b> (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
<b>3</b>	SEC USE ONLY	
<b>4</b>	<b>SOURCE OF FUNDS (SEE INSTRUCTIONS)</b> WC	
<b>5</b>	<b>CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(D) OR 2(E)</b> <input type="checkbox"/>	
<b>6</b>	<b>CITIZENSHIP OR PLACE OF ORGANIZATION</b> Delaware	
<b>NUMBER OF SHARES  BENEFICIALLY  OWNED BY EACH  REPORTING PERSON  WITH</b>	<b>7</b>	<b>SOLE VOTING POWER</b> 8,325,000
	<b>8</b>	<b>SHARED VOTING POWER</b> 0
	<b>9</b>	<b>SOLE DISPOSITIVE POWER</b> 8,325,000
	<b>10</b>	<b>SHARED DISPOSITIVE POWER</b> 0
<b>11</b>	<b>AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON</b> 8,325,000	
<b>12</b>	<b>CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)</b> <input type="checkbox"/>	
<b>13</b>	<b>PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)</b> 5.2%	
<b>14</b>	<b>TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)</b> OO – limited liability company	

<b>1</b>	<b>NAMES OF REPORTING PERSONS</b> <b>I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)</b> NRM VI HOLDINGS I, LLC I.R.S. IDENTIFICATION NO.: 27-1471440	
<b>2</b>	<b>CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP</b> (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
<b>3</b>	SEC USE ONLY	
<b>4</b>	<b>SOURCE OF FUNDS (SEE INSTRUCTIONS)</b> WC	
<b>5</b>	<b>CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(D) OR 2(E)</b> <input type="checkbox"/>	
<b>6</b>	<b>CITIZENSHIP OR PLACE OF ORGANIZATION</b> Virginia	
<b>NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH</b>	<b>7</b>	<b>SOLE VOTING POWER</b> 13,340,645
	<b>8</b>	<b>SHARED VOTING POWER</b> 0
	<b>9</b>	<b>SOLE DISPOSITIVE POWER</b> 13,340,645
	<b>10</b>	<b>SHARED DISPOSITIVE POWER</b> 0
<b>11</b>	<b>AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON</b> 13,340,645	
<b>12</b>	<b>CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)</b> <input type="checkbox"/>	
<b>13</b>	<b>PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)</b> 8.3%	
<b>14</b>	<b>TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)</b> OO – limited liability company	

<b>1</b>	<b>NAMES OF REPORTING PERSONS</b> <b>I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)</b> KAPITAL JOE, LLC I.R.S. IDENTIFICATION NO.: 45-2595931	
<b>2</b>	<b>CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP</b> (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
<b>3</b>	SEC USE ONLY	
<b>4</b>	<b>SOURCE OF FUNDS (SEE INSTRUCTIONS)</b> WC	
<b>5</b>	<b>CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(D) OR 2(E)</b> <input type="checkbox"/>	
<b>6</b>	<b>CITIZENSHIP OR PLACE OF ORGANIZATION</b> Virginia	
<b>NUMBER OF SHARES          BENEFICIALLY          OWNED BY EACH          REPORTING PERSON          WITH</b>	<b>7</b>	<b>SOLE VOTING POWER</b> 14,140,139
	<b>8</b>	<b>SHARED VOTING POWER</b> 0
	<b>9</b>	<b>SOLE DISPOSITIVE POWER</b> 14,140,139
	<b>10</b>	<b>SHARED DISPOSITIVE POWER</b> 0
<b>11</b>	<b>AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON</b> 14,140,139	
<b>12</b>	<b>CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)</b> <input type="checkbox"/>	
<b>13</b>	<b>PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)</b> 8.8%	
<b>14</b>	<b>TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)</b> OO – limited liability company	

This Amendment No. 9 (the "Amendment") amends and supplements the Statement on Schedule 13D, dated March 27, 2014 and filed on April 7, 2014, as amended by Amendment No. 1 dated December 31, 2014 and filed on January 5, 2015, by Amendment No. 2 dated May 31, 2016 and filed June 2, 2016, by Amendment No. 3 dated July 24, 2017 and filed July 26, 2017, by Amendment No. 4 dated October 16, 2017 and filed October 23, 2017, by Amendment No. 5 dated December 29, 2017 and filed on January 2, 2018, by Amendment No. 6 dated January 19, 2018 and filed January 22, 2018, by Amendment No. 7 dated July 3, 2018 and filed July 6, 2018, and by Amendment No. 8 dated May 13, 2019 and filed May 15, 2019 (the "Original Schedule 13D"), relating to the Common Stock, no par value per share (the "Common Stock"), of Intrexon Corporation, a Virginia corporation (the "Company"). Mr. Randal J. Kirk ("Mr. Kirk"), the R.J. Kirk Declaration of Trust, a revocable trust established by Mr. Kirk ("RJ DOT"), Third Security, LLC, a Virginia limited liability company that is controlled by Mr. Kirk ("Third Security"), Third Security Capital Partners V, LLC, a Delaware limited liability company that is managed by Third Security ("TSCP V"), Kapital Joe, LLC, a Virginia limited liability company that is managed by Third Security ("Kapital Joe"), and NRM VI Holdings I, LLC, a Delaware limited liability company that is managed by an affiliate that is managed by Third Security ("NRM VI Holdings" and, together with Mr. Kirk, the RJ DOT, Third Security, TSCP V, and Kapital Joe, the "Reporting Persons") are filing this Amendment to disclose the purchase by entities under the common control of Mr. Kirk of 1,739,471 shares of Common Stock, in open market transactions between May 17, 2019 and May 24, 2019 (the "Purchased Shares").

**Item 3. Source and Amount of Funds or Other Consideration.**

Item 3 of the Original Schedule 13D is hereby amended and supplemented as follows:

The following Reporting Persons, entities managed by Third Security, or entities for which a Reporting Person is trustee (hereinafter collectively referred to as the "Purchasing Entities"), each utilized its working capital to purchase 1,739,471 shares, in open market transactions between May 17, 2019 and May 24, 2019, for an aggregate purchase price of approximately \$8,119,000.

Entity	Number of Purchased Shares	Percentage of Shares of Common Stock Purchased
RJ DOT	609,268	35.026%
JPK 2008, LLC	16,560	0.952%
JPK 2009, LLC	125,693	7.226%
JPK 2012, LLC	55,907	3.214%
MGK 2008, LLC	15,898	0.914%
MGK 2009, LLC	130,703	7.514%
MGK 2011, LLC	56,741	3.262%
ZSK 2008, LLC	15,620	0.898%
ZSK 2009, LLC	11,654	0.670%
Kellie L. Banks (2009) Long Term Trust	5,637	0.324%
Third Security Senior Staff 2015 LLC	278,316	16.000%
Third Security Staff 2015 LLC	278,316	16.000%
Third Security Incentive 2010 LLC	139,158	8.000%



On May 13, 2019, the Purchasing Entities entered into a purchase agreement setting forth the allocation of the Purchased Shares, which allocation is set forth in the table above. Shares purchased pursuant to the purchase agreement were allocated to each purchasing entity at the same price per share.

**Item 4. Purpose of Transaction.**

Item 4 of the Original Schedule 13D is hereby amended and supplemented as follows:

The information set forth in Items 3 and 6 is incorporated herein by reference.

The shares disclosed herein were acquired by the Purchasing Entities for investment purposes.

**Item 5. Interest in Securities of the Issuer.**

Items 5(a) and (b) of the Original Schedule 13D are hereby amended and restated to read in their entirety as follows:

(a) and (b) See items 11 and 13 of the cover pages to this Statement for the aggregate number of shares and percentage of issued and outstanding shares of Common Stock of the Company owned by the Reporting Persons. The percentage ownership is calculated based on 160,764,358 shares of Common Stock issued and outstanding as of April 30, 2019 as disclosed in the Intrexon Corporation Quarterly Report on Form 10-Q for the period ended March 31, 2019 and filed on May 9, 2019, increased by 508,617 shares of Common Stock issued to Third Security on May 1, 2019, pursuant to the Services Agreement by and between the Company and Third Security dated November 1, 2015, as amended by the First Amendment to the Services Agreement dated October 31, 2016, as amended by the Second Amendment to the Services Agreement dated December 30, 2016, as amended by the Third Amendment to the Services Agreement dated December 28, 2017, and as amended by the Fourth Amendment to the Services Agreement dated April 18, 2019.

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<b>Reporting Person</b>	<b>Amount of Common Stock Beneficially Owned</b>	<b>Percent of Class</b>	<b>Sole Power to Vote or Direct the Vote</b>	<b>Shared Power to Vote or Direct the Vote</b>	<b>Sole Power to Dispose or to Direct the Disposition</b>	<b>Shared Power to Dispose or to Direct the Disposition</b>
Randal J. Kirk	72,179,353	44.8%	72,179,353	--	72,179,353	--
R.J. Kirk Declaration of Trust	17,534,241	10.9%	17,534,241	--	17,534,241	--
Third Security, LLC	54,492,677	33.8%	54,492,677	--	54,492,677	--
Third Security Capital Partners V, LLC	8,325,000	5.2%	8,325,000	--	8,325,000	--
NRM VI Holdings I, LLC	13,340,645	8.3%	13,340,645	--	13,340,645	--
Kapital Joe, LLC	14,140,139	8.8%	14,140,139	--	14,140,139	--

Mr. Kirk could be deemed to have indirect beneficial ownership of the shares of Common Stock directly beneficially owned by the RJ DOT, Third Security, TSCP V, Kapital Joe, and NRM VI Holdings. Mr. Kirk controls Third Security, which is the manager of TSCP V and Kapital Joe and which manages the manager of NRM VI Holdings.

(c) Except as disclosed in the Original 13D and this Amendment, none of the Reporting Persons have engaged in any transactions in the Company's Common Stock in the past 60 days.

(d) – (e) Not applicable

**Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.**

Item 6 of the Original Schedule 13D is hereby amended and restated to read in its entirety as follows:

The Reporting Persons' response to Item 3 is incorporated herein by reference.

**Item 7. Material to be Filed as Exhibits.**

Exhibit 1 Joint Filing Agreement, dated as of May 24, 2019, by and among Randal J. Kirk, the R.J. Kirk Declaration of Trust, Third Security, LLC, Third Security Capital Partners V, LLC, Kapital Joe, LLC, and NRM VI Holdings I, LLC.

**SIGNATURES**

After reasonable inquiry and to the best of their knowledge and belief, the undersigned certify that the information set forth in this statement is true, complete and correct.

Date: May 24, 2019

/s/ Randal J. Kirk

Randal J. Kirk

**R.J. KIRK DECLARATION OF TRUST**

By: /s/ Randal J. Kirk

Randal J. Kirk

Trustee

**THIRD SECURITY, LLC**

By: /s/ Randal J. Kirk

Randal J. Kirk

Manager

**THIRD SECURITY CAPITAL PARTNERS V, LLC**

By: /s/ Randal J. Kirk

Randal J. Kirk

Manager

**KAPITAL JOE, LLC**

By: /s/ Randal J. Kirk

Randal J. Kirk

Manager

**NRM VI HOLDINGS I, LLC**

By: /s/ Randal J. Kirk

Randal J. Kirk

Manager

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**EXHIBIT INDEX**

[Exhibit 1](#) Joint Filing Agreement, dated as of May 24, 2019, by and among Randal J. Kirk, the R.J. Kirk Declaration of Trust, Third Security, LLC, Third Security Capital Partners V, LLC, Kapital Joe, LLC, and NRM VI Holdings I, LLC.

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**Joint Filing Agreement**

In accordance with Rule 13d-1(k) promulgated under the Securities Exchange Act of 1934, as amended, the persons named below agree to the joint filing on behalf of each of them a Statement on Schedule 13D (including amendments thereto) with regard to the common stock of Intrexon Corporation, and further agree that this Joint Filing Agreement be included as an exhibit to such joint filings. In evidence thereof, the undersigned, being duly authorized, hereby execute this agreement as of the 24<sup>th</sup> day of May, 2019.

Date: May 24, 2019

/s/ Randal J. Kirk

Randal J. Kirk

**R.J. KIRK DECLARATION OF TRUST**

By: /s/ Randal J. Kirk

Randal J. Kirk

Trustee

**THIRD SECURITY, LLC**

By: /s/ Randal J. Kirk

Randal J. Kirk

Manager

**THIRD SECURITY CAPITAL PARTNERS V, LLC**

By: /s/ Randal J. Kirk

Randal J. Kirk

Manager

**KAPITAL JOE, LLC**

By: /s/ Randal J. Kirk

Randal J. Kirk

Manager

**NRM VI HOLDINGS I, LLC**

By: /s/ Randal J. Kirk

Randal J. Kirk

Manager

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