

SCHEDULE 13G Under the Securities Exchange Act of 1934

Amendment No.: 2*

Name of Issuer: OSI SYSTEMS, INC.

Title of Class of Securities: Common Stock

CUSIP Number: 671044105

Date of Event Which Requires Filing of this Statement: 12/31/2019

Check the appropriate box to designate the rule pursuant to which this Schedule is filed.

Rule 13d-1(b) Rule 13d-1(c) Rule 13d-1(d)

* 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 the disclosures provided in a prior cover page.

The information required in 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).

CUSIP No.: 671044105

1. NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON Janus Henderson Group plc EIN #00-0000000

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP a. ___ b. ___

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION Jersey, Channel Islands

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

5. SOLE VOTING POWER 0**

6. SHARED VOTING POWER 1,823,646**

7. SOLE DISPOSITIVE POWER 0**

8. SHARED DISPOSITIVE POWER 1,823,646**

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,823,646**

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES Not applicable

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 9.9%**

12. TYPE OF REPORTING PERSON IA, HC

** See Item 4 of this filing

CUSIP No.: 671044105

1. NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON Janus Henderson Triton Fund 01-0825912

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP a. ___ b. ___

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION Massachusetts

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

5. SOLE VOTING POWER 0**

6. SHARED VOTING POWER 1,321,798**

7. SOLE DISPOSITIVE POWER 0**

8. SHARED DISPOSITIVE POWER 1,321,798**

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
1,321,798**

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES
Not applicable

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 7.2%**

12. TYPE OF REPORTING PERSON IV

** See Item 4 of this filing

Item 1. (a). Name of Issuer: OSI SYSTEMS, INC. ("OSI Systems")

(b). Address of Issuer's Principal Executive Offices:

12525 Chadron Avenue Hawthorne, CA 90250

Item 2. (a)-(c). Name, Principal Business Address, and Citizenship of
Persons Filing:

(1) Janus Henderson Group plc 201 Bishopsgate EC2M 3AE, United Kingdom
Citizenship: Jersey, Channel Islands

(2) Janus Henderson Triton Fund 151 Detroit Street Denver, Colorado
80206 Citizenship: Massachusetts

(d). Title of Class of Securities: Common Stock

(e). CUSIP Number: 671044105

Item 3.

This statement is filed pursuant to Rule 13d-1(b) or 13d-2(b) and the
person filing, Janus Henderson Group plc ("Janus Henderson"), is a
parent holding company/control person in accordance with Section
240.13d-1(b)(ii)(G). See Item 4 for additional information.

Janus Henderson Triton Fund is an Investment Company registered under
Section 8 of the Investment Company Act of 1940.

Item 4. Ownership

The information in items 1 and 5 through 11 on the cover page(s) on
Schedule 13G is hereby incorporated by reference.

Janus Henderson has an indirect 97% ownership stake in Intech Investment
Management LLC ("Intech") and a 100% ownership stake in Janus Capital
Management LLC ("JCM"), Perkins Investment Management LLC ("Perkins"),
Geneva Capital Management LLC ("Geneva"), Henderson Global Investors
Limited ("HGIL") and Janus Henderson Investors Australia Institutional
Funds Management Limited ("JHIAIFML"), (each an "Asset Manager" and
collectively as the "Asset Managers"). Due to the above ownership
structure, holdings for the Asset Managers are aggregated for purposes
of this filing. Each Asset Manager is an investment adviser registered
or authorized in its relevant jurisdiction and each furnishing
investment advice to various fund, individual and/or institutional
clients (collectively referred to herein as "Managed Portfolios").

As a result of its role as investment adviser or sub-adviser to the
Managed Portfolios, JCM may be deemed to be the beneficial owner of
1,823,646 shares or 9.9% of the shares outstanding of OSI Systems Common
Stock held by such Managed Portfolios. However, JCM does not have the
right to receive any dividends from, or the proceeds from the sale of,
the securities held in the Managed Portfolios and disclaims any
ownership associated with such rights.

Janus Henderson Triton Fund is an investment company registered under
the Investment Company Act of 1940 and is one of the Managed Portfolios
to which JCM provides investment advice.

Item 5. Ownership of Five Percent or Less of a Class

Not applicable.

Item 6. Ownership of More than Five Percent on Behalf of Another Person

The Managed Portfolios, set forth in Item 4 above, have the right to

receive all dividends from, and the proceeds from the sale of, the securities held in their respective accounts.

The interest of one person, Janus Henderson Triton Fund, an investment company registered under the Investment Company Act of 1940, in OSI Systems Common Stock amounted to 1,321,798 shares or 7.2% of the total outstanding Common Stock.

These shares were acquired in the ordinary course of business, and not with the purpose of changing or influencing control of the Issuer.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company

Intech, JCM, Perkins, Geneva, HGIL and JHIAIFML are indirect subsidiaries of Janus Henderson and are registered investment advisers furnishing investment advice to Managed Portfolios.

Item 8. Identification and Classification of Members of the Group

Not applicable.

Item 9. Notice of Dissolution of Group

Not applicable.

Item 10. Certification

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired in the ordinary course of business and were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired in connection with or as a participant in any transaction having such purposes or effect.

SIGNATURES

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

JANUS HENDERSON GROUP PLC

By /s/ Kristin Mariani
Kristin Mariani, Global Head of Investment Compliance
Date 2/13/2020

JANUS HENDERSON TRITON FUND

By /s/ Susan K. Wold
Susan K. Wold, Chief Compliance Officer
Date 2/13/2020

EXHIBIT A JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, the persons named below agree to the joint filing on behalf of each of them of a Statement on Schedule 13G (including amendments thereto) with respect to the Common Stock of OSI SYSTEMS, INC. and further agree that this Joint Filing Agreement be included as an Exhibit to such joint filings. In evidence thereof, the undersigned hereby execute this Agreement as of the 13th day of February, 2020.

JANUS HENDERSON GROUP PLC

By /s/ Kristin Mariani
Kristin Mariani, Global Head of Investment Compliance

JANUS HENDERSON TRITON FUND

By /s/ Susan K. Wold
Susan K. Wold, Chief Compliance Officer