UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Amendment No. 01)*

MTS SYSTEMS CORP

(Name of Issuer)

Common Stock

(Title of Class of Securities)

553777103

(CUSIP Number)

December 31, 2017

(Date of Event Which Requires Filing of this Statement)

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

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

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).

^{*} 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.

CUSIP 553777103 No. NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) 1 Clearbridge Investments, LLC 01-0846058 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) 2 (a) x (b) o SEC USE ONLY 3 CITIZENSHIP OR PLACE OF ORGANIZATION 4 **Delaware Limited Liability Corporation SOLE VOTING POWER** 5 788,598 NUMBER OF SHARED VOTING POWER **SHARES** BENEFICIALLY 6 **OWNED BY** 0 **EACH REPORTING** SOLE DISPOSITIVE POWER PERSON WITH: 7 788,899 SHARED DISPOSITIVE POWER 8 0 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9

788,899

10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)			
	o			
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)			
	4.43%			
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)			
	IA			
	FOOTNOTES			

CUSIP 553777103 No. NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) 1 Clearbridge, LLC 52-1268629 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) 2 (a) x (b) o SEC USE ONLY 3 CITIZENSHIP OR PLACE OF ORGANIZATION 4 Maryland Limited Liability Corporation **SOLE VOTING POWER** 5 220,601 NUMBER OF SHARED VOTING POWER **SHARES** BENEFICIALLY 6 **OWNED BY** 0 **EACH** REPORTING SOLE DISPOSITIVE POWER PERSON WITH: 7 277,211 SHARED DISPOSITIVE POWER 8 0 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9

277,211

10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)			
	o			
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)			
	1.56%			
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)			
	IA			
	FOOTNOTES			

Item 1. Name of Issuer (a) MTS SYSTEMS CORP Address of Issuer's Principal Executive Offices (b) 14000 Technology Drive Eden Prairie, MN 55344 Item 2. (a) Name of Person Filing Clearbridge Investments, LLC Clearbridge, LLC (b) Address of Principal Business Office or, if none, Residence 620 8th Avenue New York, NY 10018 100 International Drive Baltimore, MD 21202 (c) Citizenship **Delaware Limited Liability Corporation** Maryland Limited Liability Corporation (d) Title of Class of Securities Common Stock **CUSIP** Number (e) 553777103 Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a: (a) Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o). 0 (b) Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c). o (c) Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c). o (d) o Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8). (e) An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E); o (f) An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F); o

- (g) o A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);
- (h) o A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) oA church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
 - (j) o A non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J).
- (k)xA group, in accordance with § 240.13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J), please specify the type of institution:

Item 4.	Ownership.				
Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.					
	(a)	Amount beneficially owned: 1,066,110			
	(t	Percent of class: 5.99%			
	(c)	Number of shares as to which the person has:			
	(i)	Sole power to vote or to direct the vote: 1,009,199			
	(ii)	Shared power to vote or to direct the vote: 0			
	(iii)	Sole power to dispose or to direct the disposition of: 1,066,110			
	(iv)	Shared power to dispose or to direct the disposition of: 0			
Item 5.		Ownership of Five Percent or Less of a Class			
If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following o .					
N/A					
Item 6.	Item 6. Ownership of More than Five Percent on Behalf of Another Person.				
N/A					
Item 7.	17. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company				
N/A					
Item 8.		Identification and Classification of Members of the Group			
Clearbridge Investments, LLC					
Clearbridge, LLC					
Item 9.		Notice of Dissolution of Group			
N/A					

Item Certification 10.

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect, other than activities solely in connection with a nomination under §240.14a-11.

SIGNATURE

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.

ClearBridge Investments, LLC

Date: February 14, 2018 By: /s/ Barbara Brooke Manning

Name: Barbara Brooke Manning Title: General Counsel & Chief

Compliance Officer

ClearBridge, LLC

Date: February 14, 2018 By: /s/ Barbara Brooke Manning

Name: Barbara Brooke Manning Title: General Counsel & Chief

Compliance Officer

Footnotes:

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See 18 U.S.C. 1001)