

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

SCHEDULE 13G

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT
TO RULE 13d-1(b), (c), AND (d) AND AMENDMENTS THERETO FILED
PURSUANT TO RULE 13d-2(b)

(AMENDMENT NO. 0)*

Cognex Corporation

(Name of Issuer)

Common Stock, \$.002 par value

(Title of Class of Securities)

192422103

(CUSIP Number)

Eddie C. Brown
Brown Capital Management, LLC
1201 N. Calvert Street
Baltimore, MD 21202
(410) 837-3234

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

May 31, 2018

(Date of Event which Requires Filing of this Statement)

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 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).

1. NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)		
Brown Capital Management, LLC		
2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)		(a) [] (b) []
3. SEC USE ONLY		
4. CITIZENSHIP OR PLACE OF ORGANIZATION		
State of Maryland		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5. SOLE VOTING POWER	
	5,857,501	
	6. SHARED VOTING POWER	
	None	
	7. SOLE DISPOSITIVE POWER	
	8,945,704	
	8. SHARED DISPOSITIVE POWER	
	None	
9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		
8,945,704		
10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) []		
11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)		
5.17%		
12. TYPE OF REPORTING PERSON (see instructions)		
IA		

- Item 1.**
- (a) Name of Issuer
Cognex Corporation
 - (b) Address of Issuer's Principal Executive Offices
One Vision Drive
Natick, Massachusetts 01760-2059
- Item 2.**
- (a) Name of Person Filing
Brown Capital Management, LLC
 - (b) Address of the Principal Office or, if none, residence
1201 N. Calvert Street
Baltimore, MD 21202
 - (c) Citizenship
Brown Capital Management, LLC is a Maryland Limited Liability Company
 - (d) Title of Class of Securities
Common Stock, \$.002 par value
 - (e) CUSIP Number
192422103

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).
- (b) Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
- (c) Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).
- (d) 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);
- (f) An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G);
- (h) A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) A 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) Group, in accordance with §240.13d-1(b)(1)(ii)(J).

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:	8,945,704
(b)	Percent of class:	5.17%
(c)	Number of shares as to which the person has:	
(i)	Sole power to vote or to direct the vote:	5,857,501
(ii)	Shared power to vote or to direct the vote:	None
(iii)	Sole power to dispose or to direct the disposition of:	8,945,704
(iv)	Shared power to dispose or to direct the disposition of:	None

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 [] .

Instruction. Dissolution of a group requires a response to this item.

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

All of the shares of Common Stock set forth in Item 4 are owned by various investment advisory clients of Brown Capital Management, LLC, which is deemed to be a beneficial owner of those shares pursuant to Rule 13d-3 under the Securities Exchange Act of 1934, due to its discretionary power to make investment decisions over such shares for its clients and/or its ability to vote such shares. In all cases, persons other than Brown Capital Management, LLC have the right to receive, or the power to direct the receipt of, dividends from, or the proceeds from the sale of the shares. No individual client holds more than five percent of the class.

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

Not applicable

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 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.

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.

Brown Capital Management, LLCBy: /s/ Eddie C. Brown

Name: Eddie C. Brown

Title: CEO

Date: June 8, 2018