

Digital Realty Trust, Inc.  
Form 424B7  
May 01, 2014

**Filed Pursuant to Rule 424(b)(7)**

**Registration No. 333-163505**

**PROSPECTUS SUPPLEMENT NO. 16**

**(To Prospectus dated December 4, 2009)**

**7,435,118 Shares**

**Common Stock**

This prospectus supplement no. 16 supplements the prospectus dated December 4, 2009 and supersedes, in its entirety, prospectus supplement no. 15, dated April 22, 2014, relating to the resale by selling securityholders of shares of our common stock issuable upon exchange of the 5.50% Exchangeable Senior Debentures due 2029 of our operating partnership, Digital Realty Trust, L.P.

You should read this prospectus supplement no. 16 in conjunction with the prospectus. This prospectus supplement no. 16 is not complete without, and may not be delivered or used except in conjunction with, the prospectus, including any amendments or supplements to it. This prospectus supplement no. 16 is qualified by reference to the prospectus, except to the extent that the information provided by this prospectus supplement no. 16 supersedes information contained in the prospectus.

**You should consider carefully the risk factors beginning on page 2 of the prospectus as well as the risk factors relating to our business that are incorporated by reference in the prospectus before investing in the shares of common stock issuable upon exchange of the debentures.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of the prospectus or this prospectus supplement no. 16. Any representation to the contrary is a criminal offense.**

**The date of this prospectus supplement no. 16 is May 1, 2014.**

The section entitled "Selling Securityholders" in the prospectus is superseded in its entirety with the following:

### SELLING SECURITYHOLDERS

The 5.50% Exchangeable Senior Debentures due 2029, or the debentures, were originally issued by Digital Realty Trust, L.P., our operating partnership, and sold by the initial purchasers of the debentures in transactions exempt from the registration requirements of the Securities Act to persons reasonably believed by the initial purchasers to be qualified institutional buyers as defined by Rule 144A under the Securities Act. Under certain circumstances, we may issue shares of our common stock upon the exchange of the debentures. In such circumstances, the recipients of shares of our common stock, whom we refer to as the selling securityholders, may use this prospectus and any accompanying prospectus supplement to resell from time to time the shares of our common stock that we may issue to them upon the exchange of the debentures. Information about selling securityholders is set forth in this prospectus, and information about additional selling securityholders may be set forth in a prospectus supplement, in a post-effective amendment or in filings we make with the SEC under the Exchange Act that are incorporated by reference in this prospectus.

The following table sets forth information, as of May 1, 2014, with respect to the selling securityholders and the maximum number of shares of our common stock offered, or that could become beneficially owned, by each selling securityholder upon the exchange of the debentures. The information is based on information provided by or on behalf of the selling securityholders. The selling securityholders may offer all, some or none of the shares of our common stock which we may issue upon the exchange of the debentures. The maximum number of shares of our common stock offered, or issuable upon the exchange of the debentures, shown in the table below assumes exchange of the full amount of debentures held by each selling securityholder at the maximum exchange rate of 27.9096 shares of our common stock per \$1,000 principal amount of debentures and a cash payment in lieu of any fractional share. The percent of shares of common stock beneficially owned before and after resale is based on 135,344,816 shares of common stock outstanding as of April 25, 2014.

| Name <sup>(1)</sup>  | Common Stock<br>Beneficially<br>Owned<br>before Resale <sup>(2)</sup> |         | Maximum<br>Number of<br>Shares of<br>Common<br>Stock<br>Offered <sup>(3)</sup> | Common Stock<br>Beneficially Owned after<br>Resale <sup>(4)</sup> |         |
|--|---|---------|--|---|---------|
|  | Shares  | Percent |  | Shares  | Percent |
| Advent Convertible Arbitrage Master Fund <sup>(12)</sup>     | 82,137  | *       | 82,137   |   |         |
| AGC <sup>(12)</sup>  | 100,446   | *       | 100,446  |   |         |
| Alcon Laboratories <sup>(12)</sup>                           | 10,131  | *       | 10,131   |   |         |
| Allianz NACM Income and Growth Fund <sup>(5)</sup>           | 12,419  | *       | 12,419   |   |         |
| AQR Absolute Return Master Account, L.P. <sup>(13)</sup>     | 104,661   | *       | 104,661  |   |         |
| AQR DELTA Master Account, L.P. <sup>(13)</sup>               | 600,754   | *       | 600,754  |   |         |
| AQR DELTA Sapphire Fund, L.P. <sup>(13)</sup>                | 27,909  | *       | 27,909   |   |         |
| AQR DELTA XN Master Account, L.P. <sup>(13)</sup>            | 73,960  | *       | 73,960   |   |         |
| AQR Funds AQR Multi-Strategy Alternative Fund <sup>(3)</sup> | 170,248   | *       | 170,248  |   |         |

|  |           |      |           |           |      |
|--|-----------|------|-----------|-----------|------|
| AQR Opportunistic Premium Offshore Fund <sup>(13)</sup>                | 69,774    | *    | 69,774    |           |      |
| AVK (Advent Gaymore) <sup>(12)</sup>                                   | 142,338   | *    | 142,338   |           |      |
| Basso Holdings Ltd. <sup>(21)</sup>                                    | 558,192   | *    | 558,192   |           |      |
| Black Diamond Offshore Ltd. <sup>(7)</sup>                             | 7,954     | *    | 7,954     |           |      |
| British Virgin Islands Social Security Board <sup>(12)</sup>           | 4,437     | *    | 4,437     |           |      |
| Capstone Volatility Master (Cayman) Limited <sup>(26)</sup>            | 139,548   | *    | 139,548   |           |      |
| CNH CA Master Account, L.P. <sup>(6)</sup>                             | 18,141    | *    | 18,141    |           |      |
| CNH Diversified Opportunities Fund <sup>(6)</sup>                      | 13,954    | *    | 13,954    |           |      |
| Columbia Convertible Securities Fund <sup>(8)</sup>                    | 322,605   | *    | 307,005   | 15,600    | *    |
| CSS, LLC <sup>(17)</sup>   | 558,192   | *    | 558,192   |           |      |
| Daiwa Strategic Advisors Corporation <sup>(19)</sup>                   | 209,322   | *    | 209,322   |           |      |
| Deutsche Bank AG, acting through its London Branch <sup>(27)</sup>     | 2,133,916 | 1.6% | 113,033   | 2,020,882 | 1.5% |
| Domestic & Foreign Missionary Society <sup>(12)</sup>                  | 2,204     | *    | 2,204     |           |      |
| Double Black Diamond Offshore LDC <sup>(7)</sup>                       | 131,593   | *    | 131,593   |           |      |
| General Motors Mgmt Investment Co Trust <sup>(12)</sup>                | 75,244    | *    | 75,244    |           |      |
| Grady Hospital <sup>(12)</sup>   | 3,377     | *    | 3,377     |           |      |
| HFR CA Op. Master Trust Fund <sup>(12)</sup>                           | 2,372     | *    | 2,372     |           |      |
| Highbridge Convertible Opportunities Master Fund, L.P. <sup>(9)</sup>  | 71,169    | *    | 71,169    |           |      |
| Highbridge International LLC <sup>(9)</sup>                            | 1,088,474 | *    | 1,088,474 |           |      |
| Hudson Bay Master Fund Ltd. <sup>(18)</sup>                            | 1,114,988 | *    | 1,114,988 |           |      |
| Independence Blue Cross <sup>(12)</sup>                                | 18,811    | *    | 18,811    |           |      |
| Inflective Convertible Opportunity Fund I, L.P. <sup>(11)</sup>        | 139,548   | *    | 139,548   |           |      |
| Inflective Convertible Opportunity Fund I, LTD <sup>(11)</sup>         | 432,598   | *    | 432,598   |           |      |
| Institutional Benchmark Series <sup>(12)</sup>                         | 7,591     | *    | 7,591     |           |      |
| Institutional Benchmark Series Ivan Segregated Account <sup>(11)</sup> | 41,864    | *    | 41,864    |           |      |
| KBC Financial Products USA Inc. <sup>(10)</sup>                        | 305,386   | *    | 305,386   |           |      |
| Lyxor/Inflective Convertible Opportunity Fund <sup>(11)</sup>          | 167,457   | *    | 167,457   |           |      |
| Morgan Stanley Convertible Securities Trust <sup>(14)</sup>            | 20,932    | *    | 20,932    |           |      |
| Nicholas-Applegate Convertible and Income Fund (CVT) <sup>(5)</sup>    | 233,463   | *    | 233,463   |           |      |
| Nicholas-Applegate Convertible and Income Fund II (CVT) <sup>(5)</sup> | 185,180   | *    | 185,180   |           |      |
| Occidental Petroleum Corporation <sup>(12)</sup>                       | 8,540     | *    | 8,540     |           |      |
| Oppenheimer & Co. Inc. <sup>(28)</sup>                                 | 8,372     | *    | 8,372     |           |      |
| Orchard Hill Master Fund Ltd. <sup>(22)</sup>                          | 4,006,757 | 3.0% | 4,006,757 |           |      |
| Oregon Convertible Opportunities Bond Fund, L.P. <sup>(6)</sup>        | 69,550    | *    | 69,550    |           |      |
| Principal Funds, Inc. Global Multi-Strategy Fund <sup>(3)</sup>        | 20,932    | *    | 20,932    |           |      |
| ProMutual <sup>(12)</sup>  | 21,518    | *    | 21,518    |           |      |
| Royal Bank of Canada <sup>(16)</sup>                                   | 1,271,324 | *    | 97,683    | 1,173,641 | *    |
| San Francisco City & County <sup>(12)</sup>                            | 27,379    | *    | 27,379    |           |      |
| SMI Defensive LP <sup>(20)</sup>                                       | 1,349     | *    | 1,349     |           |      |
| Special Opportunities Offshore Fund Ltd. <sup>(6)</sup>                | 55,819    | *    | 55,819    |           |      |

|   |         |   |         |
|---|---------|---|---------|
| Trustmark <sup>(12)</sup>   | 8,819   | * | 8,819   |
| Wolverine Flagship Fund Trading Limited <sup>(23)</sup>                             | 466,536 | * | 466,536 |
| Van Kampen Harbor Fund <sup>(15)</sup>  | 48,841  | * | 48,841  |
| Value Line Income & Growth, Inc.  | 4,186   | * | 4,186   |
| The Guardian Life Insurance Company of America <sup>(24)</sup>                      | 128,384 | * | 128,384 |
| The Guardian Life Insurance Company of America Master Pension Trust <sup>(25)</sup> | 22,327  | * | 22,237  |

\* Less than one percent of the outstanding shares of common stock.

- (1) Additional selling securityholders not named in this prospectus will not be able to use this prospectus for resales until they are named in the selling securityholder table by a prospectus supplement or post-effective amendment.
- (2) Calculated based on Rule 13d-3(d)(1)(i) under the Exchange Act, except assumes that the debentures are exchanged at the maximum exchange rate of 27.9096 shares of our common stock per \$1,000 principal amount of the debentures.
- (3) The maximum aggregate number of shares of common stock that may be sold under this prospectus will not exceed 7,435,118.
- (4) Assumes that each selling securityholder will sell the maximum number of shares of common stock for which the outstanding debentures held by such selling securityholder are exchangeable.
- (5) Nicholas-Applegate Capital Management LLC, or Nicholas-Applegate, is an investment adviser registered under the Investment Advisers Act of 1940. Nicholas-Applegate is an affiliate of Nicholas-Applegate Securities LLC, a limited purpose broker-dealer registered with the Financial Industry Regulatory Authority effective April 1993. Nicholas-Applegate Securities LLC was organized in December 1992 for the sole purpose of distributing mutual funds sponsored by Nicholas-Applegate. The selling securityholder has delegated full investment authority to Nicholas-Applegate, as investment adviser, over these securities, including full dispositive power. The Chief Investment Officer of Nicholas-Applegate is Horacio A. Valeiras, CFA, who, in such capacity, has oversight authority over all portfolio managers at Nicholas-Applegate. To the knowledge of Nicholas-Applegate, the securities listed herein were not acquired as compensation for employment, underwriting or any other services performed by the selling securityholder for the benefit of the issuer. The selling securityholder has certified that it purchased the securities being offered by it in the ordinary course of business, and at the time of the purchase of such securities, had no agreements or understandings, directly or indirectly, with any person to distribute such securities.
- (6) CNH Partners, LLC, as the sub-advisor of the selling securityholder, has discretionary voting and investment authority over the shares owned by CNH CA Master Account, L.P. CNH Partners, LLC is controlled indirectly by Todd Pulvino and Mark Mitchell. Accordingly, Todd Pulvino and Mark Mitchell may be deemed to share voting and investment authority over the shares owned by the selling securityholder.

- (7) Clint D. Carlson has the power to direct the voting and disposition of the securities held by Black Diamond Offshore Ltd. and Double Black Diamond Offshore LDC.
- (8) Yanfang (Emma) Yan, Director and Senior Equity Portfolio Manager, has the power to direct the voting and disposition of the securities held by Columbia Convertible Securities Fund.
- (9) Highbridge Capital Management, LLC is the trading manager of the selling securityholder and has the power to direct the voting and disposition of the securities held by the selling securityholder. Glenn Dubin and Henry Swieca control Highbridge Capital Management, LLC and have voting control and investment discretion over the securities held by the selling securityholder. Each of Highbridge Capital Management, LLC, Glenn Dubin and Henry Swieca disclaims beneficial ownership of the securities held by the selling securityholder.
- (10) The securities are under the total control of KBC Financial Products USA Inc. KBC Financial Products USA Inc. is a direct wholly-owned subsidiary of KBC Financial Holdings, Inc., which in turn is a direct wholly-owned subsidiary of KBC Bank N.V., which in turn is a direct wholly-owned subsidiary of KBC Group N.V., a publicly traded entity.
- (11) Thomas J. Ray, C.I.O. of Inflective Asset Management, LLC, has the power to direct the voting and disposition of the securities held by the selling securityholder.
- (12) Tracy V. Maitland, Chief Investment Officer and President of Advent Capital Management LLC, has the power to direct the voting and disposition of the securities held by the selling securityholder.
- (13) AQR Capital Management, LLC, or AQR, is the investment advisor of the selling securityholder and has delegated investment management authority to CNH Partners, LLC, or CNH. As sub-advisor, CNH has shared dispositive power over the securities held by the selling securityholder and exercises full discretionary control relating to all investment decisions made on behalf of the selling securityholder. Clifford S. Asness, Ph.D., and John M. Liew are the investment principals for AQR. Mark Mitchell and Todd Pulvino are the investment principals for CNH. As such, Clifford S. Asness, John M. Liew, Mark Mitchell and Todd Pulvino have shared discretionary voting and investment authority over the shares owned by the selling securityholder.
- (14) Morgan Stanley Convertible Securities Trust is an investment company, subject to the Investment Company Act of 1940.
- (15) Van Kampen Asset Management, as the selling securityholder's investment advisor, has discretionary authority to direct the voting and disposition of the securities held by Van Kampen Harbor Fund, an investment company, subject to the Investment Company Act of 1940.
- (16) Royal Bank of Canada is an investment company, subject to the Investment Company Act of 1940. Royal Bank of Canada is an affiliate of RBC Capital Markets Corporation, a registered broker-dealer. Royal Bank of Canada has certified that it purchased the securities being offered by it in the ordinary course of business, and at the time of the purchase of such securities, had no agreements or understandings, directly or indirectly, with any person to distribute such securities.
- (17) CSS, LLC is a registered broker-dealer. CSS, LLC has certified that it purchased the securities being offered by it in the ordinary course of business as an investment, and that it is not, and does not intend to act as, an underwriter for the securities. Nicholas D. Schoewe and Clayton A. Struve share the power to direct the voting and disposition of the securities held by CSS, LLC.

- (18) Hudson Bay Capital Management, L.P., the investment manager of the selling securityholder, has voting and investment power over the securities held by the selling securityholder. Sander Gerber is the managing member of Hudson Bay Capital GP LLC, which is the general partner of Hudson Bay Capital Management, L.P. Sander Gerber disclaims beneficial ownership over the securities held by the selling securityholder.
- (19) Daiwa America Strategic Advisors Corporation is a direct, wholly-owned subsidiary of Daiwa Capital Markets America Holdings Inc., which in turn is a direct, wholly-owned subsidiary of Daiwa International Holdings Inc., which in turn is a wholly-owned subsidiary of Daiwa Securities Group Inc., a publicly traded entity headquartered and incorporated in Japan. Daiwa America Strategic Advisors Corporation is an affiliate of Daiwa Capital Markets America Inc., a broker-dealer registered with the U.S. Securities and Exchange Commission. Daiwa America Strategic Advisors Corporation has certified that it purchased the securities being offered by it in the ordinary course of business, and at the time of the purchase of such securities, had no agreements or understandings, directly or indirectly, with any person to distribute such securities.
- (20) Louise Morwick, President and Portfolio Manager of Silvercreek Management Inc., has the power to direct the voting and disposition of the securities held by the selling securityholder.
- (21) Basso Capital Management, L.P., or Basso, is the investment manager to the selling securityholder. Howard Fischer is a managing member of Basso GP LLC, the general partner of Basso. Mr. Fischer and the other managing members have the power to direct the voting and disposition of the securities held by the selling securityholder.
- (22) Orchard Hill Capital Management LP, the investment manager of the selling securityholder, has voting and investment power over the securities held by the selling securityholder. Marc Fussteig is the managing member of the general partner of Orchard Hill Capital Management LP. Each of Orchard Hill Master Fund Ltd. and Marc Fussteig disclaims beneficial ownership of the securities held by the selling securityholder for purposes of Sections 13 and 16 of the Securities Exchange Act of 1934, as amended. The selling securityholder has granted Deutsche Bank Securities Inc. a security interest in 692,717.26 shares of common stock offered hereby. If the selling securityholder defaults in the performance of its secured obligations, Deutsche Bank Securities Inc. may offer and sell such shares of common stock from time to time pursuant to this prospectus supplement and accompanying prospectus. The selling securityholder has also granted BNP Paribas Prime Brokerage, Inc. a security interest in 2,403,441.60 shares of common stock offered hereby. If the selling securityholder defaults in the performance of its secured obligations, BNP Paribas Prime Brokerage, Inc. may offer and sell such shares from time to time pursuant to this prospectus supplement and the accompanying prospectus. See Plan of Distribution in the accompanying prospectus.
- (23) Wolverine Asset Management, LLC, or WAM, is the investment manager of the selling securityholder and has voting and investment power over the securities held by the selling securityholder. The sole member and manager of WAM is Wolverine Holdings, L.P., or Wolverine Holdings. Robert R. Bellick and Christopher L. Gust are deemed to control Wolverine Trading Partners, Inc., or WTP, the general partner of Wolverine Holdings, and share voting and dispositive power over the securities held by the selling securityholder. Each of Mr. Bellick, Mr. Gust, WTP, Wolverine Holdings and WAM disclaims beneficial ownership of the securities held by the selling securityholder.

- (24) John Murphy, Managing Director, has the power to direct the voting and disposition of the securities held by The Guardian Life Insurance Company of America. Park Avenue Securities LLC and Guardian Investor Services LLC, which are indirect wholly-owned subsidiaries of The Guardian Life Insurance Company of America, are registered broker-dealers. The Guardian Life Insurance Company of America has certified that it purchased the securities being offered by it in the ordinary course of business, and at the time of the purchase of such securities, had no agreements or understandings, directly or indirectly, with any person to distribute such securities.
- (25) The Guardian Life Insurance Company of America is the plan sponsor for The Guardian Life Insurance Company of America Master Pension Trust. John Murphy, a Managing Director of The Guardian Life Insurance Company of America, has the power to direct the voting and disposition of the securities held by The Guardian Life Insurance Company of America Master Pension Trust.
- (26) Paul M. Britton, Ebony Myles-Berry and Geoff Ruddick are Directors of Capstone Volatility Master (Cayman) Limited and have the power to direct the voting and disposition of the securities held by Capstone Volatility Master (Cayman) Limited.
- (27) Deutsche Bank AG, acting through its London Branch ( Deutsche Bank AG London ) is an affiliate of Deutsche Bank Securities, Inc., a registered broker-dealer. Deutsche Bank AG London has certified that it purchased the securities being offered by it in the ordinary course of business, and at the time of the purchase of such securities, had no agreements or understandings, directly or indirectly, with any person to distribute such securities.
- (28) Oppenheimer & Co. Inc. is a registered broker-dealer. Oppenheimer & Co. Inc. has certified that it purchased the securities being offered by it in the ordinary course of business as an investment, and that it is not, and does not intend to act as, an underwriter for the securities.