

Creating a VALIDATION_KEY The process of creating a VALIDATION_KEY must be done by the campus web application. The process must be performed according to the methodology described below.

Important! Please forward the following information regarding the creation of a VALIDATION_KEY to the administrator responsible for the campus web application that will communicate with uPay.

Important! To use the VALIDATION_KEY option, the administrator of the campus web application must have prior experience in MD5 (Message-Digest algorithm 5) and Base64 encoding. It is beyond the scope of this document to describe how to create an MD5 hash. Likewise, it is beyond the scope of the document to describe how to perform Base64 encoding.

The following steps should not be considered static steps that create a static value. These steps should be dynamically performed by the campus web application for each uPay transaction.

Use the following steps to create the encoded value for the VALIDATION_KEY parameter:

- 1 Create a text string in this format:
[Passed Amount Validation Key][EXT_TRANS_ID][AMT].
 - **Passed Amount Validation Key**—The "Passed Amount Validation Key" is a unique identifying code. The uPay site manager and the administrator of the campus web application must agree on this value. The value must be stored as part of the campus web application. The uPay site must also be configured with this value, as described in [uPay Site Configuration for the VALIDATION_KEY Option](#). This value may contain a maximum of 30 alphanumeric characters.
 - **EXT_TRANS_ID**—The EXT_TRANS_ID is generated by the campus web application. This ID serves as a cross-reference between the campus web application and uPay. This value should be generated dynamically by the campus web application. Ideally, this ID will be a unique value. For more information, see [About the EXT_TRANS_ID Parameter](#). This value may contain a maximum of 250 alphanumeric characters.
 - **AMT**—The dollar amount of the transaction. For more information, see [About the AMT Parameter](#). This parameter may contain a maximum of 8 numeric characters, including two numeric characters to the right of the decimal point. Dollar values are NOT required to include cents. For example, \$25 could be represented as 25 or 25.00. However, you MUST use the same value for AMT when generating the VALIDATION_KEY value as when passing the AMT parameter to uPay. Maximum value: 99999.99.

Note: Do not include brackets or plus signs in the text string. For example, for the following values —"Passed Amount Validation Key"=EDR123, EXT_TRANS_ID=ENG4, AMT=\$25.00—the text string would be EDR123ENG425.00.

- 2 Create an MD5 hash using the text string.
- 3 Base64 encode the MD5 hash.

Note: MD5 hash values are typically in hex format, so you will need the ability to Base64 encode a value in hex format. If you cannot Base64 encode a value in hex format, you can decode the MD5 hash into ASCII text and then perform Base64 encoding. If you are using a Base64 encoding tool, be sure you are using values in the proper format. For example, if you place a hex format value into the ASCII text field of a Base64 encoding tool, you will NOT get a correct result.

- 4 Pass this value to the uPay site, as described in [Passing a VALIDATION_KEY to a uPay Site](#).