

Customer Release Notes

BCL Convert v3.10.5

INTRODUCTION

These Release Notes detail the latest release of BCL Convert, including known issues.

BCL Convert converts per cycle binary data output by Illumina sequencers containing basecall files and quality scores to per read FASTQ files.

FEATURES

- Per-sample settings for mixed workflows (unannounced)
 - Allow per sample `OverrideCycles` to be specified in the Data section of the sample sheet
 - Allow per sample index sizes to be specified in the Data section of the sample sheet, where the per sample `OverrideCycles` setting determines which cycles to use for each sample
 - NOTE: Still requires both indices to uniquely identify a sample or combinatorial group
 - Allow per sample `BarcodeMismatchesIndex1` and `BarcodeMismatchesIndex2` to be specified
 - Allow per sample Adapter Settings to be specified, including `AdapterBehavior`, `AdapterRead1`, `AdapterRead2`, and `AdapterStringency`
- A barcode collision will now be detected if sequences from either index read in a dual index run collide, as opposed to requiring both indices colliding. When this occurs the software will error out
- Increased values reported to 6 decimal points in the following stats outputs:
 - '% of Hopped Reads' and '% of All Reads' columns of `Index_Hopping_Metrics.csv`
 - '% of Unknown Barcodes' and '% of All Reads' columns of `Top_Unknown_Barcodes.csv`
- Allow the number of unknown barcodes reported to be set via the command line option `--num-unknown-barcodes-reported`, where the default is 1000 and any integer from 0 can be specified, including "all" to output all unknown barcodes
- Performance and robustness improvements

RESOLVED ISSUES

- Top Unknown Barcodes '% of Unknown Barcodes' is now % of all unknown, not just % of printed unknown barcodes (i.e. not affected by number of barcodes being output)
- Fixed a crash when a pure lane specifier is followed by a '+' for 'tiles' & 'exclude-tiles' command-line options (e.g. `--tiles s_1+s_2`)
- Fixed a crash when `config.xml` is present in BaseCalls directory on aggregated-bcl inputs (`bcl.bgzf`)
- Fixed a bug where incorrect demux or data is produced when a run has a Read 1 size less than 25 cycles

KNOWN ISSUES

- If a directory is specified as input to `--sample-sheet`, `bcl-convert` will hang at the beginning of a run while trying to copy that path as a file to `<outdir>/Reports/SampleSheet.csv`

- BCL Convert does not validate when “Logs” or “Reports” is provided for a Sample_Project, and the software will be unable to create the subdirectories if these string are provided.
- BCL Convert will not provided a warning or error when a corrupt bci lane file is found in strict or robust mode
- BCL Convert does not support the --first-tile-only option being specified for SP flow cells, but the new **-tiles** option can be used as a substitute.